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ABSTRACT

A project was conducted to establish the validity of a procedure and set of instruments to facilitate a more systematic approach for the continued staff development of inservice secondary and postsecondary vocational instructors in three states (Kentucky, Virginia, and Wisconsin) with different delivery systems. The population consisted of a volunteer sample of 453 vocational instructors, 53 immediate supervisors, and about 5,800 students. The study required that each teacher, supervisor, and pupil complete two optical scan instruments rating each teacher on (1) a Professional Needs Assessment Instrument, and (2) an Evaluation of Instruction Instrument. In order to test the validity and reliability of this procedure and of the instruments, answers were sought relating to reliability, content validity, concurrent validity, utility validity, and relative costs of the instruments. On the Needs Assessment Instrument it was found that there were no differences among the three states in terms of reliability, concurrent validity, utility validity, or relative costs. Differences existed, however, in terms of content validity; that is, the proportion of items judged to be relevant to the classroom behaviors of teachers. For the Evaluation of Instruction Instrument, similar results were found. Recommendations and cautions for implementing this staff development procedure in local school systems were made. (KC)

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# Staff Development Procedures for Inservice Vocational Instructors:

## An Instrument Validation Study

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1982

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# PREFACE

This is the report of a U. S. Office of Education grant to test the external validity of a set of instruments and a computerized feedback procedure for in-service secondary and postsecondary vocational pupils, teachers and supervisors in three states: Kentucky, Virginia and Wisconsin. As such, it represents the culmination of about eight years of research concerning the important areas of assessing the professional and pedagogical needs and the effectiveness of in-service vocational teachers as judged by teachers, supervisors and pupils.

Eight years of research by the members of the staff and graduate students at Minnesota Research and Development Center for Vocational Education has produced six different graduate student dissertations, two state project reports and numerous presentations at various professional vocational meetings both in the State and nationally. The focus of these efforts pertained to the general concept of improving the quality of instruction through a systematic staff development procedure for in-service secondary and postsecondary teachers.

It is believed that only through such a systematic procedure, together with the close coordination of the expertise of teacher educators, will it be possible to enhance the quality of in-service education within the field of vocational education.

# ACKNOWLEDGEMENTS

This project was only possible as the result of the cooperation of many dedicated vocational educators in the states of Kentucky, Virginia and Wisconsin. While it is not possible to personally acknowledge the contributions of the many secondary and postsecondary vocational students, teachers and supervisors in the three states, it is possible to identify and formally recognize the contribution of selected individuals within each of the three states, who assisted in coordinating the project activities.

The project staff wish to thank Mr. Arnold Wilson, EPD Coordinator from Kentucky and Mr. Roland Krogstad, State Department, EPD Coordinator from Wisconsin and Ms. Maud Goldston, State Department of Education, EPD Coordinator from Virginia for giving the permission and encouragement to conduct the project in their respective states.

We wish to express our appreciation to teacher educators, Dr. Carl Lamar, University of Kentucky and Dr. James Hoerner, Virginia Polytechnic Institute for serving as a liaison between the teacher education institutions and the participating secondary and post-secondary vocational administrators, teachers and supervisors in their respective states.

We also wish to take this opportunity to express appreciation to individuals who served as cite coordinators for the project staff in each of the separate schools participating in the project and for devoting the time and effort to collect, sort and mail all of the forms to the project staff. In the state of Kentucky the coordinators were: Mr. B. M. Hatley, Ms. Joyce Logan and Mr. Paul Hammack, Regional Coordinator from Madisonville, Kentucky; Mr. John G. Corwin from Covington, Kentucky and Mr. W. L. Ford of Somerset, Kentucky.

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It was a privilege to have had the opportunity to work closely with many dedicated professionals in the field of vocational education and without whose assistance a national project of this scope and complicity could not have been conducted.

# ABSTRACT

Vocational education personnel have historically been concerned with improving the quality of instruction in secondary and post-secondary vocational schools. Also, historically, the role of improving the quality of instruction in vocational education has relied heavily on teacher education institutions to deliver updating and licensure requirement courses to inservice secondary and postsecondary vocational instructors. While this approach to improving the quality of inservice vocational teachers has been relatively successful in meeting the pedagogical and professional needs of vocational instructors, it tends to be quite unsystematic. The purpose of this report is to summarize the results of a U. S. Office of Education project to establish the external validity of a procedure and set of instruments to facilitate a more systematic approach for the continued staff development of inservice secondary and postsecondary vocational instructors in three participating states.

The population consisted of a volunteer sample of a total of eight secondary and ten secondary/postsecondary vocational schools in three different states purposely selected because of the different structures for delivering secondary and postsecondary vocational instruction: Kentucky, Virginia, and Wisconsin. The project included a total of 453 vocational instructors, 53 immediate supervisors and about 5,800 students representing at least one class of students for each 453 vocational instructors who participated in the study.

The design of the study required that each teacher, supervisor and pupil complete two optical scan instruments rating each teacher on (a) a Professional, Pedagogical Needs Assessment Instrument and (b) an Evaluation of Instruction Instrument. Because an optical scan form was used in the study, it was possible to provide each teacher with a computerized summary of the aggregate data provided by the students in their class on each of the two assessment instruments. It was also possible to aggregate teacher, supervisor and student data within each participating school by (a) vocational program, (b) vocational field

and (c) for the total school. It was believed that by using these two instruments and obtaining ratings from teachers, supervisors and pupils, it would be possible and feasible to implement a systematic, reliable and valid approach to identifying and subsequently delivering services designed to meet the unique Pedagogical and Professional Need of each vocational instructor. Through this procedure, using the computerized feedback, it was believed that systematic staff development would be enhanced at all levels of vocational education within each vocational school.

In order to empirically test the external validity and reliability of this procedure and for the Professional Needs Assessment Instrument and the Evaluation of Instruction Instrument, answers to a series of criterion questions for each of the two instruments were sought. These questions here related to (a) reliability, (b) content validity, (c) concurrent validity, (d) utility validity and (e) relative costs of each of the instruments in terms of the student, teacher and supervisor ratings. Data were analyzed separately for secondary and post-secondary vocational programs within each of the three participating states and for each of the two instruments, in relationship to the same five criterion questions.

The findings and conclusions of the study as they related to the two sets of instruments for both secondary and post-secondary pupils, teachers, and supervisors are presented first in terms of the Needs Assessment Instrument and secondarily for the Evaluation of Instruction Instrument.

1. There were no differences among the three states for secondary and post-secondary pupils, teachers and supervisors in terms of the reliability of the Needs Assessment Instrument. Total instrument and scale scores reliabilities r = .75 or above.
2. There were differences among the three states for secondary and post-secondary pupils, teachers and supervisors in terms of the content validity of the Needs Assessment Assessment Instrument as it relates to the perceived relevance of the task statement to a teacher's current job responsibilities. Secondary students judged items to be more relevant than post-secondary personnel.
3. There were no practical differences among the three states in terms of the concurrent validity or extent of agreement among the ratings of secondary and post-secondary pupils, teachers and

supervisors on the professional Needs Assessment Instrument. Almost all correlation coefficients among the sets of ratings were low, negative and non-significant for secondary and post-secondary vocational pupil, teacher and supervisor ratings.

4. There were no differences among the three states in terms of the utility validity of the needs assessment data in terms of accuracy and usefulness of the feedback data for helping teachers improve teaching practices and developing a plan for continued professional growth for secondary and post-secondary teachers and supervisors.
5. There were no differences among the three states in terms of the relative costs for implementing the program of staff development which could not be explained by the differing numbers of pupils, teachers and supervisors who participated in the project. Average cost per teacher/supervisor were $23.00 - $24.00.

Evaluation of Instruction

Similar conclusions are reported for the validation criteria concerning the Evaluation of Instruction Instrument.

1. There are no differences among the three states in terms of the reliability of secondary and post-secondary pupils, teachers and supervisors on the Evaluation of Instruction Instrument. All reliability coefficients were .85 or above.
2. There were differences among the three states in terms of the proportion of items judged to be relevant to the classroom behaviors of teachers, but the instruments seemed to have more content validity for secondary vocational education pupils, teachers, and supervisors than for postsecondary teachers, pupils, and supervisors.
3. There were no practical differences among the three states in terms of the concurrent validity or the extent of agreement among secondary and post-secondary pupils, teachers, and supervisors in terms of their ratings on the Evaluation of Instruction Instrument. Few ratings were statistically significant and some were negatively correlated showing low agreement.
4. There were relatively slight differences among the three states in terms of the judgments concerning the utility validity (usefulness and accuracy) of the data provided to secondary and post-secondary teachers

and supervisors concerning the usefulness of the data for changing teaching practices and using the information for developing a plan for professional development.

5. There were no differences among the three states in terms of the relative costs for implementing the Evaluation of Instruction Instrument for secondary and postsecondary pupils, teachers and supervisors. The average costs were $23.00 to $24.00.

Recommendations for additional research were made together with procedural cautions which should be exercised in selecting and implementing this staff development procedure in a local school system.

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# Part I
# INTRODUCTION

## PURPOSE

This is the final report of the U. S. Office of Education funded project to test the external validity of a system of staff development for in-service vocational instructors in three states. This funded project was the result of eight years of research initially conducted by the Minnesota Research and Development Center for Vocational Education located in the Department of Vocational and Technical Education at the University of Minnesota. The purpose of this report is to (a) provide a rationale and background to the particular approach taken to in-service staff development for vocational instructors, (b) describe the objectives and findings of the U. S. Office of Education project and (c) to suggest ways in which the concept of continuous professional growth and development of vocational education personnel can be facilitated and further educational research conducted. This report is divided into six parts: Part I deals with the introduction to the problem, (2) Part II is a review of literature on the concept of inservice staff development, (3) Part III is the rationale used for the design of the study, (4) Part IV is the findings related to the Professional Needs Assessment Instrument, (5) Part V pertains to the findings for the Evaluation of Instruction Instrument, and Part VI pertains to the Conclusions and Recommendations.

## THE PROBLEM

During the year 1977-78 a U. S. Office of Education grant was obtained by the Minnesota Research and Development Center for Vocational Education, University of Minnesota to further test the external validity of a system of staff development for secondary and post-secondary vocational instructors in three cooperating states: Kentucky, Virginia, and Wisconsin. The justification and need for further research was based on the premise that in-service secondary and post-secondary instructors have had to historically rely on institutions of higher education to provide the necessary courses to meet certification and licensure requirements in order to maintain their teaching credentials, but that

this process often times is (a) unsystematic, (b) does not make explicit a continuing concern for the professional growth and development of the individual vocational instructors, (c) provides little, if any, feedback to individuals as to their unique professional needs or their effectiveness as a vocational instructor, (d) provides little information for staff development within vocational service areas or within a school and (e) qualitative decisions about staff development for schools are often made on the bases of something other than valid and reliable information. In general then, the problems of a continuous, systematic plan for staff development for secondary and post-secondary vocational instructors was perceived as a problem of developing companion sets of valid and reliable instruments for assessing the pedagogical needs and effectiveness of in-service vocational instructors and providing computerized feedback reports to individual instructors, vocational supervisors, vocational service areas and for the total school. More will be said about the rationale and criteria for the system of in-service staff development for vocational instructors in other sections of this report.

## CRITERION QUESTIONS/OBJECTIVES

The purpose of the study was to determine if the instruments and proposed system of staff development for in-service secondary and post-secondary vocational instructors was shown to be equally valid, reliable, and useful for secondary and post-secondary pupils, teachers and supervisors of teachers for the participating schools in three states: Kentucky, Virginia, and Wisconsin. In order to test the validity and reliability of the instruments, a series of specific, empirical questions were posed with specific comparisons made by state and by secondary and post-secondary vocational personnel within and across the three states. By providing these types of data comparisons, it was believed possible to assess the psychometric attributes of both instruments and the general staff development procedures for each of the three states separately and for secondary and post-secondary personnel within the three states. There were a total of five general objectives with subsequent criterion questions which were posed in order to assess the attributes of (a) the Professional Needs Assessment Instrument, and (b) the Evaluation of Instruction Instrument. The five general objectives were the same for both instruments. The five objectives

of the study relate to: (1) reliability, (2) content validity, (3) concurrent validity, (4) utility validity, and (5) relative costs. Each of the five objectives are first assessed in terms of the Needs Assessment Instrument and secondarily for the Evaluation of Instruction Instrument. Figure 1 shows the general strategy for presenting the findings.

## Reliability: Criterion Questions

General Objective #1

To determine the reliability of the Professional Needs Assessment and Evaluation of Instruction Instrument for secondary and post-secondary pupils, teachers, and supervisors in three states.

Criterion Questions

a) Are there differences among the three participating states in terms of the reliability of secondary and post-secondary vocational pupils, teachers, and supervisors' responses to a Professional Needs Assessment Instrument as estimated by Cronbach's alpha test of internal consistency?

b) Are there differences among the three participating states in terms of the reliability of secondary and post-secondary vocational pupils, teachers, and supervisor responses to an Evaluation of Instruction Instrument as estimated by Cronbach's alpha test of internal consistency?

## Content Validity: Criterion Questions

General Objective #2

To determine the content validity of the Professional Needs Assessment Instrument and Evaluation of Instruction Instrument for secondary and post-secondary pupils, teachers, and supervisors in each of three participating states.

Criterion Questions

a) Are there differences among the three participating states in terms of the proportion of secondary and post-secondary vocational pupils, teachers, and supervisors who rated the tasks on the Professional Needs Assessment Instrument as being relevant to the role of the teacher as estimated by the frequency and percent of tasks.

b) Are there differences among the three participating states in terms of the proportion of secondary and post-secondary vocational pupils, teachers and supervisors who rated tasks on the Evaluation of Instruction Instrument as being relevant to the role of the teacher as estimated by the frequency and percent of tasks.

Figure 1

| Objectives | Needs assessment | | | | | | Evaluation of instruction | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Secondary | | | Post secondary | | | Secondary | | | Post secondary | | |
| | KY | VIR | WIS | KY | VIR | WIS | KY | VIR | WIS | KY | VIR | WIS |
| Reliability | | | | | | | | | | | | |
| Content validity | | | | | | | | | | | | |
| Concurrent validity | | | | | | | | | | | | |
| Utility validity | | | | | | | | | | | | |
| Relative Costs | | | | | | | | | | | | |

## Concurrent Validity: Criterion Questions

General Objective #3

To determine the concurrent validity of the Professional Needs Assessment and Evaluation of Instruction Instrument for secondary and post-secondary pupils, teachers, and supervisors in each of three participating states.

Criterion Questions

a) Are there differences among the three participating states in terms of the extent of agreement among ratings of secondary and post-secondary school pupils, teachers, and supervisors of teachers on a Professional Needs Assessment Instrument as estimated by Pearson Product Moment Correlation Coefficients.

b) Are there differences among the three participating states in terms of the extent of agreement among ratings of secondary and post-secondary personnel on an Evaluation of Instruction Instrument as estimated by Pearson Product Moment Correlation Coefficients.

## Utility Validity: Criterion Questions

General Objective #4

To determine the utility validity of the Professional Needs Assessment and Evaluation of Instruction and Instruments for secondary and post-secondary vocational pupils, teachers, and supervisors in each of three participating states.

Criterion Questions

a) Are there differences among the three participating states in terms of the proportion of secondary and post-secondary teachers and supervisors who rated the utility or usefulness and accuracy of the computer feedback printouts of Professional Needs Assessment tasks as important for planning a continuous program of professional improvement.

b) Are there differences among the three participating states in terms of the proportion of secondary and post-secondary teachers and supervisors who rated the accuracy, utility, and usefulness of the computerized feedback of the Evaluation of Instruction Instrument as important for planning a program of continuous professional improvement.

## Relative Costs: Criterion Questions

General Objective #5

To determine the relative costs of administering the Professional Needs Assessment Instrument and the Evaluation Instruction Instrument for

secondary and post-secondary vocational pupils, teachers, and supervisors in each of three participating states.

Criterion Questions

a) Are there differences among the three participating states in terms of the relative costs for implementing the Professional Needs Assessment Instrument for secondary and post-secondary vocational students, teachers, and supervisors.

b) Are there differences among the three participating states in terms of the relative costs of implementing the Evaluation of Instruction Instruments for secondary and post-secondary vocational students, teachers, and supervisors.

## OPERATIONAL DEFINITIONS

Reliability for the Professional Needs Assessment and Evaluation of Instruction Instrument for secondary and post-secondary pupils, teachers, and supervisors within the three states was tested using Cronbach's Alpha test of internal consistency. This represents the most conservative test of reliability for judging the performance of a teacher on both the needs assessment and evaluation of instruction instruments for secondary and post-secondary instructors in each of three states. If the data show that the instruments and ratings of pupils, teachers, and supervisors have high reliabilities for each of the three participating states, then other interpretations about validity can be made with a reasonable degree of confidence.

The content validity of the Professional Needs Assessment Instruments and the Evaluation of Instruction Instruments was estimated by the proportion of pupils, teachers, and supervisors who rated the tasks listed on the instruments as activities that were perceived to be part of the instructor's responsibilities and, therefore should be expected to perform. This represented one way to assess the relevance of the items of the Professional Needs Assessment Instrument and the responsibilities of each vocational instructor. It was estimated that not all instructors were necessarily expected to perform all tasks in their current teaching situation, but if the instruments are to be used for communicating staff development needs, then there should be some agreement among teachers, supervisors and pupils on those tasks which most teachers are expected to perform.

Concurrent validity was estimated by the extent to which there was agreement among the ratings of pupils, teachers, and supervisors on the need for teachers to improve on certain tasks which were perceived to be related to the instructor's job for both needs assessment and teacher effectiveness instruments. It was reasoned that if there was high agreement among the three groups of raters, then one could be reasonably confident that the ratings were consistent and accurate. On the other hand, if there was little agreement among the raters, it may indicate that (a) each group of raters had a different perception of the responsibilities and capabilities of the teacher or (b) there is a need for a continuous assessment procedures to better clarify and communicate these differences among the relevant groups.

Utility validity represented a global assessment of the extent to which the specific computerized feedback of the item ratings of pupils, teachers, and supervisors would assist the teacher in making qualitative improvements in teaching and/or developing a more realistic plan for continued professional development. In general, this represented an attempt to assess the usefulness of the data and the computerized feedback procedures as a technique for improving teaching and/or developing a program of professional improvement.

The relative costs of the staff development procedure used in this study was estimated by the total cost for participating in the project if the schools or states would have to finance it themselves or purchase the services from the University of Minnesota. Costs would include, (a) purchasing instruments, (b) scoring of instruments, (c) computer costs for feedback reports, (d) feedback notebooks, (e) identification lable costs and (f) costs for envelope packets for pupils, teachers and supervisors. Developmental costs would not be included in these estimates. It should be noted that other costs (e.g., mailing, transportation, secretarial assistance) are variable costs and not included in these estimates. Also, these costs are estimates based only on the number of completed forms received and analyzed and number of feedback notebooks generated.

The estimated costs include the following items together with the per unit cost of each item.

| | | |
|---|---|---|
| a. | Teacher/supervisor background information forms. | .05 each |
| b. | Scoring background information form. | .25 each |

| | | |
|---|---|---|
| c. | Evaluation of instruction forms | .05 each |
| d. | Scoring evaluation of instruction form. | .25 each |
| e. | Teacher/supervisor professional need assessment forms. | .05 each |
| f. | Student needs assessment forms. | .05 each |
| g. | Scoring teacher, supervisor pupil forms. | .25 each |
| h. | Computer feedback costs ($15/mi - approximately 1 min.) | |
| i. | Teacher/supervisor identification labels | .02 each |
| j. | Teacher/supervisor/student packet envelopes. | .15 each |
| k. | Soft cover feedback costs. | 2.00 each |

Figure 1 shows the procedure that was used to present the data for each of the five objectives and to provide answers to each of the criterion questions. As implied by Figure 1, each of the major objectives and criterion questions are presented and discussed for the Professional Needs Assessment Instrument for only the secondary students and secondarily for post-secondary vocational personnel for each of the three participating states.

Similarly, the second part of the report presents data related to each of the five general objectives and the subsequent criterion questions for the Evaluation of Instruction Instrument.

In summary then, data for each of the five general objectives and the criterion questions is presented and discussed first in terms of the Professional Needs Assessment Instrument for secondary and post-secondary pupils, teachers, and supervisors, respectively. A second part of the report deals separately with the same five general objectives and criterion questions as they relate to the Evaluation of Instruction Instruments. The last portion of the report is devoted to summary, conclusions, implications and recommendations. It is necessary to divide the findings of this report into these sections because of (a) the number of criterion questions posed, (b) the volume of data presented, and (3) the sets of instruments could be used separately or in combination with each other.

# Part II
# REVIEW OF LITERATURE

## NEEDS ASSESSMENT

Most authors on the subject of vocational-technical staff development regard in-service education as an accepted fact (Ely, 1973). For determining the professional development needs of teachers, two basic strategies have been utilized. The more traditional strategy for identifying teacher instructional needs has been to collect and examine teacher demographic data either on a statewide or school system/building basis. This strategy is exemplified by Bell (1974) when he addresses the topic of "Needs Assessment." Bell asks such questions as (1) Is the faculty primarily new and/or inexperienced? (2) Is it heavily staffed with teachers who lack recency of training or education? (3) What do the records of teachers reveal about turnover, absenteeism, and sick leave? The data for these questions would be examined by school administrators and they would plan developmental activities accordingly for their staff.

The second strategy for assessing in-service professional needs is through teacher effectiveness ratings or evaluations. Teacher effectiveness is, for example, predicated upon whether or not teachers can bring about desired changes in the skills, attitudes, knowledges, and appreciations of students (Millman, 1971; McNeil and Popham, 1973). Based on student achievement scores, plans for teacher development would be advocated. Teacher evaluations operate in a similar fashion except that teachers are rated by students, administrators and others (Herman, 1973; Wentling and Lawson, 1975). From the results of these teacher ratings, inferences are made depicting their developmental needs and then plans are designed to alleviate these inferred needs.

In industry, Morano (1973) suggests methods for assessing training needs in an organization: (1) surveys, (2) manpower analysis, and (3) organizational analysis. The survey consists of identifying managers and other groups of individuals who probably know specific training needs and then conduct a survey to find out their opinions as to the

nature of the training required. Manpower analysis would be used to determine the extent of training and experience of the present work force. Organizational analysis consists of analyzing the product of the organization during production and after the product is sold. The views of (Bass and Vaughan, 1966) concerning the assessment of training needs are consistent with Morano's recommendations. The following quotation seems to summarize Morano's view for determining organizational training needs (Morano, 1973, p. 282):

> We must recognize the worth of the individual's own valuable insight into himself, his perceptions about his strengths and his weaknesses. If we couple this with expert counseling, the chances are immeasurably enhanced of obtaining an appropriate remedial training plan for the individual, which will hopefully benefit the organization. We must, then, have a two-pronged attack -- one from the point of view of the organization and one from the individuals themselves.

According to this quotation, the individuals who are to receive the training are considered to have valid insight into their own training needs. Heneman (1974) exemplified this approach in a study dealing with managerial performance.

If teachers are to be actively involved in planning and conducting their professional development (Lano, 1971), a logical extrapolation is that teachers should be directly involved in assessing their professional needs. In order for anyone to assess the professional needs of vocational-technical teachers, the professional (instructional) process of vocational-technical teaching must need to be made explicit. Until relatively recently, limited research existed which made explicit the process of instruction in any observable or verifiable manner for vocational-technical teachers.

One of the forerunners for identifying the process of instruction of vocational teachers was Walsh (1960) with his list of 107 competencies for trade and industrial education teachers. Since that time, a variety of studies have been undertaken to identify vocational-technical teacher competencies (e.g., Brown and Okey, 1973; Cotrell, et. al., 1972; Ely, 1973; Graziano, 1974; Gunderson, 1971; Johnson and Sherron, 1969; O'Kelley, et. al., 1974; Pope, 1972). Perhaps the study by Cotrell and others has received the widest acclaim. Another series of studies have attempted to develop a system for assessing the relevance of

the content of teacher education courses to the needs of teachers (Wayne State University (1971, 1972, and Cook, 1972). However, this system involves only the validation of the content of courses for certification but, does not systematically provide feedback to teachers concerning their strengths and weaknesses. Another study, (Kearny State College, 1972) attempted to identify a common core of certification competencies, but also lacked the feedback system of the previous studies.

Since the process of instruction has been made explicit by the identification of competencies, it logically follows that professional teacher needs can be assessed in a more direct manner than by teacher demographic data and teacher evaluations as noted earlier. Assessing teacher needs based on professional teacher competencies or performance behaviors is advocated by Polhemus (1975) in what he terms as "process accountability." Of course, assessing professional teacher needs based on teacher performance is consistent with the teacher education movement that is sweeping the country -- Performance-Based Teacher Education.

## TEACHER EFFECTIVENESS

Since the early 1900's, teacher effectiveness has been the focus of considerable research with limited useful information generated from these efforts (Barr, 1964; Biddle and Ellena, 1964; Glass, 1974; McNeil and Popham, 1973; Popham, 1975). While the research in academic fields is relatively abundant, substantially fewer studies have been conducted on teacher effectiveness in vocational and technical education. A preliminary review of the literature has revealed approximately 35 references, dated from 1926 to 1975, which are in some manner related to vocational-technical teacher effectiveness.

Basically, three criteria have been used in teacher effectiveness research: (1) efficiency and/or effectiveness ratings by one or more groups (i.e., students, supervisors, administrators, peers, and teachers themselves); (2) systematic observations; and (3) student gains on various types of paper and pencil achievement tests; (Barr, 1964); Popham, 1975). While there appears to be general agreement that the ultimate criterion of teacher effectiveness involves some measure of pupil performance (Barr, 1964; Biddle and Ellena, 1964; Dunkin and Biddle, 1974; Gage, 1967; McNeil and Popham, 1973; and Popham, 1975), many

researchers, because of the difficulty of obtaining such measures, have ignored this ultimate criterion and focused instead on more readily available or easily obtainable criteria.

Of the research reviewed thus far in vocational-technical education, four studies (Crabtree, 1966; Kapes and Pawlowski, 1974; Popham, 1971; and Rau, 1971) used some form of student achievement test as the criterion variable. One study used systematic observations (Roberts and Becker, 1973) while another study (Olson, 1971) examined student follow-up data and employer evaluation of the on-the-job performance in former students' in judging teacher effectiveness. The remaining approximately 30 studies used ratings. There appears to be consensus that student ratings provide a very necessary and real source of evidence on the day-to-day behavior of teachers and should be included in any evaluation design (Glass, 1974; McKeachie and Lin, 1971; McNeil and Popham, 1973; Wentling and Lawson, 1975). In addition, substantial evidence exists which indicates that feedback from students is very useful (more so than supervisory feedback) in improving teacher behavior (Gage, et. al., 1960; Gage, 1973; Oliver, 1967). Although supervisor, administrator, and self-ratings are considered by some research to be less valid than student ratings, the use of multiple criteria is recommended over a single measure (Popham, 1975; Travers, 1969; Wentling and Lawson, 1975).

A variety of independent variables have been used to assess vocational-technical teacher effectiveness research ranging from the number of professional organizations to which a teacher belongs to how a teacher spends his/her leisure time. The most frequently used independent variables include: (1) education and/or technical specialty training; (2) years of teaching experience; and (3) amount of occupational experience.

Reviewing the findings of vocational-technical teacher effectiveness research, Gross (1974) and Opoham (1971) found no significant difference between the teaching effectiveness of professional educators and industry personnel. Eight investigations found non-significant results between teaching effectiveness and number of years of occupational work experience (Brooks, 1972; Brown, 1971; Conely, 1965; Evans, 1955; Jones, 1967; Musgrove, 1968; Preston, 1973; and Swartz, 1975). However, Storm (1966) found that the more successful instructors tend to have a background of

technician level work experience in industry, and two investigations (Kapes and Pawlowski, 1974; Rau, 1971) found a negative, but non-significant relationship between years of occupational experience and teacher effectiveness. Also, there does not appear to be a significant relationship between number of years of teaching experience and teacher effectiveness (Brooks, 1971; Brown, 1971; Carter, 1972; Jones, 1967; Musgrove, 1969; Swartz, 1975; Turner, 1975). While there have been some significant findings relating teacher variables to teacher effectiveness (Carter, 1972; Conley, 1966; Jones, 1967; Kapes and Pawlowski, 1974; Penner and Price, 1972; Pfahl; Preston, 1973; Roberts and Becker, 1973; Storm, 1966; Turner, 1975), there is no consistency among the variables studied.

Based on the review of literature, it would seem that both student and supervisor ratings are the most valid and reliable indices of teacher effectiveness. The construct of teacher effectiveness is a necessary element in validating any instrument which is designed to assess the in-service pedagogical needs of vocational teachers. In order to determine whether or not self-ratings of pedagogical needs are valid and reliable, it is necessary to relate these ratings to some other valid indices of teacher performance. Hence, it is necessary to deal with both the concept of needs assessment and teacher effectiveness in order to validate both constructs.

# Part III
# RATIONALE, INSTRUMENT DEVELOPMENT AND METHODOLOGY

## RATIONALE FOR STAFF DEVELOPMENT

As has been suggested, improving the quality of in-service vocational teachers has been traditionally the major concern of: (a) State Departments of vocational education and (b) vocational teacher training institutions, (c) and local secondary and post-secondary vocational schools and personnel. State Departments are concerned that each teacher meet the certification and licensure requirements which typically include some number of years of related work experience, and some amount of professional methods of teaching instruction. The exact requirements established are set forth in each state plan for vocational education and may differ by state.

Teacher training institutions, on the other hand, have been concerned with delivering instruction to in-service vocational teachers from the perspective that it is believed that each vocational instructor needs some amount of formal instruction concerning methods of teaching such that improvements in teaching practices can reasonably be expected. Thus, the concern of teacher training institutions is to deliver instruction to in-service teachers who need and can benefit from such instruction.

Historically, these organizations were the only agencies which had primary concern for in-service vocational instructors with the exception of the employing institution. For the most part, employing agencies hire teachers and are responsible to insure that teachers meet state certification and licensure requirements, but for the most part, do not have a systemmatic way to provide staff development for: (a) individuals, (b) for department staff (i.e., HE, Bus, Ed., Ag, T & I, Health, etc.), or (c) for the total school in general. It is the perception that an empirical procedure, using valid and reliable instruments and procedures, can be used for developing a program of staff development for all in-service vocational personnel at each level within an institution beginning first with individual teachers.

The procedure used in this study is based on several important assumptions:

1. Staff Development is primarily enhanced through the process of communications; communication of teachers/pupils and teacher/supervisors of teachers.
2. Communications are further enhanced when pupils, teachers and supervisors are using comparable, valid and reliable information.
3. In-service teachers can improve only when they and others can agree on various strengths and weaknesses and areas in which improvement in teaching practices can be made.
4. A hard copy feedback of valid and reliable data about teachers responsibilities and strengths and weaknesses can assist teachers to improve teaching practices.
5. Valid and reliable data can be obtained from teachers, pupils, and supervisors such that these same data in aggregate form can be used for planning by: (a) individual teachers, (b) vocational service areas, and (c) by the total school.
6. Professional needs assessment can identify the needs of teachers and assist to improve teaching and professional practices.
7. The evaluation of instruction can assess the effectiveness of the classroom behavior of a teacher.

In summary then, staff development is perceived as a process of communicating specific professional needs and capabilities of teachers to students, supervisors and school administrators such that valid plans for the continued growth and development of each teacher department, and school system can be facilitated through obtaining valid, reliable information on a common set of relevant teaching tasks. The problem was, therefore, perceived as one of (a) developing and validating a set of relevant teaching tasks which teachers either are now performing or may be expected to perform in the future (b) obtaining pupil, teacher and supervisor rating about a teacher's performance and (c) providing a computer feedback of these data to teachers, supervisors and school administrators to facilitate the process of self and internal assessments pointing out relative strengths and weaknesses of individual teachers as well as the total teachers within an instructional unit or school. Thus, comparable ratings were obtained for secondary and postsecondary pupils,

teachers and supervisors of each teachers' on a Professional Needs Assessment and Evaluation of Instruction Instrument within the three participating states.

# INSTRUMENTATION

## Needs Assessment Instrument

The development of the Professional Needs Assessment and Evaluation of Instruction Instruments were based on a comprehensive review of literature. The most comprehensive, validated listing of professional competencies needed by in-service teachers was the list developed by Cortrell, et. al. (1971) and Norton, (1975) at the National Center for Vocational Education, Ohio State University. These competencies were subsequently factor analyzed into 100 concepts and later translated into individualized teaching modules. Based on these 100 competency statements, a modified professional and pedagogical needs assessment instrument was developed and printed in an optical format. The instrument included the competencies included in the 100 Ohio State University teacher training modules, thus providing the opportunity of potentially delivering in-service training to teachers either by groups (teacher education credits) and/or individualized instruction based on the needs assessment data.

The instrument was designed to accomplish three purposes: (a) to identify the competencies which were perceived to be a part of the teacher's job, (b) to identify the competencies in which there is the greatest and least need to improve instruction related skills, and (c) to provide teachers the opportunity to select tasks which may or may not be related to their present job and/or at which they would like to become more competent for either self improvement or for advanced degree purposes. The needs assessment instrument contains 110 competency statements divided into 11 sub scales which include the competencies contained in the 100 Ohio State University CBE modules as well as other selected competencies not included in the 100 modules. The instrument was perceived as representing a universally accepted set of competency statements appropriate for secondary and post-secondary vocational instructors regardless of their degree status or immediate or long range professional goals. The items were designed to be scored by optical scan equipment.

The instrument was first pilot tested by Geigle, (1972) and by Duffy, (1974) in five post-secondary and secondary institutions in Minnesota respectively. Based on these data, the items were revised to create the 110 item Needs Assessment Instrument for pupils, teachers, and supervisors used in the USOE study.

The student Needs Assessment Instrument consisted of a total of 40 items (2-4 items purposefully selected from each of the eleven scales of the 110 item teacher and supervisor instrument). The purposive selection was based on those items or tasks performed by a teacher which were most easily observed and judged by students as being related to a teacher's job. The needs assessment administrative procedure, therefore, consisted of administering a 110 item instrument to each teacher and immediate supervisor of a teacher and a 40 item instrument to at least one class of students taught by each teacher who participated in the study.

## Evaluation of Instruction Instrument

Two procedures were used to develop the Evaluation of Instruction Instrument which assessed the classroom behaviors of secondary and post-secondary vocational instructors: (1) conducting a comprehensive review of literature relative to evaluating the effectiveness of teachers and obtaining and reviewing samples of teacher evaluation items and (2) pilot testing and subsequently revising the items in five secondary, (Isasson, 1974), four post-secondary institutions, (Allen, 1972), respectively in Minnesota.

The results of these activities produced the development of a 37 item instrument for optically scoring the ratings of teachers, students, and supervisors of the classroom behaviors and performance of each teacher. Students, teachers and supervisors rated each teacher on each of the 37 items in the instrument. All students in at least one class taught by a teacher was rated by each member of the class; the teachers rated themselves on the instrument and the supervisor completed one form for each teacher they supervised.

# ADMINISTRATIVE PROCEDURE

The rationale for the study suggests that staff development is brought about largely through a process of self-assessment and

communication of strengths and weakness of an instructor as judged by pupils, teachers and immediate supervisors. Their ratings of a set of items were believed to produce valid and reliable ratings of a teacher performance. Based on this rationale, it was both necessary and desirable to obtain judgment ratings from three different sources, namely, students, teacher self-assessments and assessments from the immediate supervisors of each teacher. By obtaining three different perspectives of a teacher's performance, it is likely that more realistic and valid assessments are made which will more likely assist teachers to be better able to develop a personal plan for continuous professional growth and development.

Two sets of three instruments were administered to teachers, pupils, and immediate supervisors during a one week period of time in the participating secondary and post-secondary instructional personnel in each of the three states: Kentucky, Virginia, and Wisconsin. In all instances, the administrators of the participating secondary and post-secondary schools who agreed to participate in the study, established a time at which the project staff could explain the purpose of the project and the procedures to be used. Prepackaged sets of both sets of instruments for teachers, supervisors, and students were distributed to site coordinators in each school. Each teacher was assigned a unique code number which include an educational level, school, and state designator. Packets of instruments were distributed to teachers and supervisors by the name, but computer returns were provided to them only by their unique code number.

## Administering Needs Assessment Instrument

The teacher packet contained a personal biographical data form, a teacher needs assessment form and 20 student needs assessment forms (one for each student in the class). Teachers were asked to complete the biographical form and the needs assessment form using only their unique code number for identification. Similarly, teachers were directed to distribute the 40 item student needs assessment form to at least one class of their students and showing the student the unique teacher code number to be used when completing the form. Students were then asked to read and respond to all items on the form. Once students' completed the forms, a student collected all the competed needs assessment forms, put them into a separate envelope, sealed it and delivered it to the central office. The teachers forms were similarly completed and returned to the central office.

## Administering Supervisor Forms

The supervisor also received a packet of forms containing: (a) biographical form, and (b) a professional needs assessment form for each teacher for whom they were responsible for providing supervision. They were instructed to completely fill out the form for each teacher under their direct supervision. When all forms were completed, they were asked to return them to the central office. Each supervisor was designated a unique identification code number which was included on each of the forms completed and was also provided a list of the teachers for whom supervision was provided together with the teacher code number. Supervisors were asked to include their unique code number and as well as the teachers' code number on each of the completed forms.

## Administering Evaluation of Instruction Instruments

The teachers' packets were similarily distributed and contained: (a) the biographical information form, (b) a teacher self assessment form, and (c) 20 student Evaluation of Instruction Instruments (enough for at least one form for every member of the class). The process for administering, coding, completing and collecting the forms was exactly the same as those used for administering the Needs Assessment Instruments.

A similar procedure was used for the supervisors. Each supervisor received a packet containing enough Evaluation of Instruction forms for each teacher for whom they had immediate supervisory responsibilities. Using their unique supervisor code number and the unique teacher code number, supervisors were directed to complete one Evaluation of Instruction Instrument for each teacher they supervised. Upon completion, the completed forms were placed in a sealed envelope and delivered to the central office.

# COLLECTING FORMS

Within each of the three participating states and within each school, an individual teacher or teacher educator was responsible for collecting the sealed envelopes for both the needs assessment and the evaluation of instruction forms for students, teachers, and supervisors at the participating secondary and post-secondary institutions. Once they were collected,

separate boxes of needs assessment and evaluation of instruction materials were sent to Minnesota Research and Development Center for: (a) optical scan scoring, (b) editing, (c) correcting, and (d) analyzing the data.

## DATA ANALYSES

The Control Data Ciber 74 computer was used to analyze all the data using: (a) the SPSS computer package, and (b) specially developed programs to analyze and provide computer feedback on a preprinted form for each: (1) teacher, (2) supervisor, and (3) school. The analysis procedure computed frequency and percentage data, mean scores for scales and total test instrument for both the needs assessment and Evaluation of Instruction Instruments. Student data for the needs assessment and Evaluation of Instruction Instruments were presented in aggregate form for each teacher. Data from pupils were provided for each teacher and aggregated across teachers for the supervisor report.

Data were analyzed separately for each of the three participating states and were aggregated across all states in order to provide summary data with respect to the overall findings of the study for each of the five objectives.

## SCORING DATA

A private Minneapolis firm (INTRAN) was contracted to read and score the optical scan forms for students, teachers, and supervisors for: (a) the needs assessment instruments, (b) the three evaluation of instruction instruments, and (c) the biographical forms.

A unit record for each teacher was created which included: (a) biographical data, (b) the teacher and student needs assessment data, (c) the teacher/pupil evaluation of instruction data. Data files were created for each teacher based on their unique identification code.

Similarly, a supervisor unit record was established for each teacher rated by a supervisor again using the unique code number for the supervisor and the unique code number for each teacher. This was done for the purpose of providing each supervisor with a feedback of their ratings for each teacher supervised as well as aggregate data for all teachers supervised in their program area. Pupil data were aggregated for each teacher and summarized across teachers for the supervisor report.

## POPULATION SAMPLE

The sample consisted of all vocational teachers and supervisors and at least one class of students for each vocational teacher in a total of eight secondary and ten post-secondary schools in three states: Kentucky, Virginia, and Wisconsin. The administrator within each of the participating schools requested that all teachers and supervisors volunteer to participate in the project, but they had the option of not participating if they wished. Thus, the operational definition of the sample consisted of all teachers and supervisors and at least one class of students who volunteered to participate in the study within eight secondary and ten post-secondary schools in three states.

Table 1 shows the number of secondary and post-secondary schools and the average class size for each school within the three participating states.

Table 1

Number of Participating Secondary and Post-Secondary Schools and Average Class Size for Three States

| | KY | Average class size | VA | Average class size | WI | Average class size | Total | Class average |
|---|---|---|---|---|---|---|---|---|
| Secondary | 2 | 16 | 4 | 13 | 2 | 17.5 | 8 | 15.5 |
| Post-secondary | 0 | 12.5 | 3 | 13.3 | 3 | 17.2 | 6 | 14.3 |
| Secondary/Post-secondary | 4* | | 0 | | | 0 | 4 | |

*Included as post-secondary except for Tables 1 and 2.

There were a total of 18 different schools participating in the study located in three states: two secondary and four post-secondary schools in Kentucky; four secondary and three post-secondary (community colleges) in Virginia; two secondary and three post-secondary schools in Wisconsin. The average numbers of students within each secondary school and post-secondary school was about 15.5 and 14.3 respectively. The schools in Wisconsin seemed to have, on the average, larger class sizes than the other two states.

Table 2 shows the total number of teachers, supervisors and pupils who volunteered to participate in the study within each of the three states and in total. Table 2 shows that a total of 145 and 308 secondary and post-secondary teachers participated in the study respectively as well as 53 secondary and post-secondary supervisors. Twenty-one supervisors were at the secondary level, 19 at the post-secondary level and 13 were supervisors of both secondary and post-secondary teachers. A total of 5777 students participated in the study; 2425 at the secondary level and 3352 at the post-secondary level.

States differed with respect to the number of teachers, supervisors, and pupils who participated in the study. This in part reflects the differences in the administrative structure and emphasis on vocational education among the three states. The emphasis on vocational education in Kentucky was at secondary level; in Virginia, vocational education is at the secondary level and post-secondary level and located in community colleges; in Wisconsin, vocational education at the secondary level is located in comprehensive secondary schools and post-secondary vocational education is provided by specialized post-secondary institutions. Table 3 shows the number of male and female teachers at the secondary and post-secondary schools in each of the three participating states.

The average percent of the total male and female teachers across the three states was about 52% males and 48% female teachers at the secondary school level and 61% male and 39% female teachers at the post-secondary

Table 2

Number of Participating Teachers (T), Supervisors (S), and Pupils (P)

| | Kentucky | | | Virginia | | | Wisconsin | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T | S | P | T | S | P | T | S | P | T | S | P |
| Secondary | 50 | 7 | 1096 | 64 | 10 | 778 | 31 | 4 | 551 | 145 | 21 | 2425 |
| Post-secondary | 102 | 0 | 794 | 78 | 6 | 876 | 128 | 13 | 1682 | 308 | 19 | 3352 |
| Secondary/post-secondary | 0 | 13* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 |

* Included as post-secondary in subsequent tables.

Table 3

Gender of Participating Teachers

| Key: % (N) | Kentucky | | Virginia | | Wisconsin | | Total | |
|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F |
| Secondary | 48.0 (24) | 52.0 (26) | 53.1 (34) | 46.9 (30) | 54.8 (17) | 45.2 (14) | 51.7 (75) | 48.3 (70) |
| Postsecondary | 58.8 (60) | 41.2 (42) | 62.3 (48) | 37.7 (29) | 61.4 (78) | 38.6 (49) | 60.8 (186) | 39.2 (120) |

school level. In general, the sample of teachers included slightly more than one half males and slightly less than one half female teachers. The proportion of male to female teachers participating in the study in each of the three states were about the same; slightly less than one half were female and more than one half were male (except for secondary school instructors in Kentucky where a majority of the instructors, 52.0% were female) and 48.0% were male.

Table 4 shows the distribution of secondary and postsecondary instructors for each of the three participating states and in total by vocational field.

A total of 145 secondary and 308 postsecondary instructors representing nine different vocational fields participated in the study. The areas of: (a) trade and industry accounted for 40.7 and 27.8% of the secondary and postsecondary sample respectively, (b) office occupations, represented the next largest vocational field with 17.9 and 18.6% for secondary and postsecondary respectively and (c) consumer homemaking accounted for 17.9% of the secondary sample but only .3% at the postsecondary level. Health and technical education accounted for 19.0% and 16.0% of the sample respectively. The fields of agriculture, distribution, and occupational home economics accounted for a relatively small part of the total sample.

In summary, the sample was most heavily weighted to T & I, Technical Health, and Office occupation teachers at the postsecondary level and Consumer homemaking, T & I and Office occupations at the secondary schools. The remaining areas accounted for a relatively small proportion of the population.

Table 4

Vocational Areas of Secondary (Sec) and Post-Secondary (P-S) Instructors

| Key: % (N) | Kentucky | | Virginia | | Wisconsin | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Sec | P-S | Sec | P-S | Sec | P-S | Sec | P-S |
| Agriculture | 4.0 | 2.0 | 4.7 | 0 | 6.5 | 5.5 | 4.8 (7) | 2.9 (9) |
| Distribution | 6.0 | 0 | 4.7 | 1.3 | 0 | 5.5 | 4.1 (6) | 2.6 (8) |
| Health | 8.0 | 20.6 | 6.3 | 23.4 | 3.2 | 15.0 | 6.2 (9) | 19.0 (58) |
| Consumer & homemaking | 30.0 | 1.0 | 4.7 | 0 | 25.8 | 0 | 17.9 (26) | .3 (1) |
| Occupational home economics | 0 | 2.9 | 6.3 | 1.3 | 3.2 | 3.1 | 3.4 (5) | 2.6 (8) |
| Office | 18.0 | 15.7 | 15.6 | 22.1 | 22.6 | 18.9 | 17.9 (26) | 18.6 (57) |
| Technical | 2.0 | 4.9 | 4.7 | 33.8 | 3.2 | 14.2 | 3.4 (5) | 16.0 (49) |
| Trades and industry | 32.0 | 47.1 | 50.0 | 16.9 | 35.5 | 18.9 | 40.7 (59) | 27.8 (85) |
| Other | 0 | 5.9 | 3.1 | 1.3 | 0 | 18.9 | 1.4 (2) | 10.1 (31) |
| Total | 100.0 (50) | 100.0 (102) | 100.0 (64) | 100.0 (77) | 100.0 (31) | 100.0 (127) | 100.0 (145) | 100.0 (306) |

Table 5 shows the biographical characteristics of the teachers who participated in the study for each of the three states and total for secondary and post-secondary instructors respectively.

For secondary school vocational instructors, the average age was about 37 years old with about seven years of vocational teaching experience and, ten years of directly related work experience of which about 18 months of it was obtained within the last five year. In terms

of age, years of teaching and work experience, there were relatively few differences among teachers in the three states with the possible exception of the secondary instructors in Virginia. On the average, secondary vocational teachers in Virginia tended to possess more work experience and obtained more related work experience in the past five years than teachers in the other two states.

In general, the secondary vocational instructors in the three states are quite well educated. Seventy-five percent possessed some post high school degree; 23% with B.S. degree; 38% Master's degree and about 38% of them working towards some advanced degree. A majority of the teachers in Wisconsin all possessed at least a B.S. degree (71%) or M.S. degree (29%), but none possessed a doctorate degree. All teachers had completed about 10 teacher education courses since beginning teaching and completed about two courses within the past two years.

Post-secondary teachers were quite well educated. On the average, 86.6% of instructors had a post high school degree, 10% technical or AA degree, 29% B.S. degree, 40% had a M.S. degree and about 2% had a doctorate degree with about 45% of the teachers working toward some type of advanced degree. The average post-secondary teacher took about 10 teacher education courses of which about two courses were taken in the past two years.

While there also appears to be some differences among the post-secondary instructors in the three states, these differences are not large. The post-secondary teachers in Virginia and Wisconsin possess the greatest proportion of B.S. degrees or above with a large percent of the post-secondary instructors working on an advanced degree than instructors in Kentucky. The teachers in Kentucky, on the average, took more in-service teacher education courses and more recently than the instructors in the other two states. These differences are probably due to the fact that the State of Kentucky has more recently refocused attention in vocational education from secondary to post-secondary education.

Table 5

Average Percent of Selected Biographical Characteristics of Secondary and Post-Secondary Vocational Instructors in Three States

| Characteristics | Secondary n=47 Kentucky | Secondary n=62 Virginia | Secondary n=31 Wisconsin | Secondary n=140 Total | Post-Secondary n=99 Kentucky | Post-Secondary n=75 Virginia | Post-Secondary n=126 Wisconsin | Post-Secondary n=300 Total |
|---|---|---|---|---|---|---|---|---|
| Age | 36.2 | 38.7 | 37.8 | 37.7 | 38.9 | 40.0 | 39.2 | 39.7 |
| Years of vocational teaching experience | 7.0 | 6.7 | 8.6 | 7.2 | 6.9 | 8.4 | 8.5 | 8.0 |
| Years of directly related work experience | 9.0 | 12.4 | 6.0 | 10.0 | 10.6 | 8.4 | 7.1 | 8.8 |
| Average months of work experience in past five years | 16.9 | 21.6 | 11.5 | 17.6 | 20.4 | 15.1 | 12.2 | 15.7 |
| Highest degree/diploma | | | | | | | | |
| HS/GED | 12.8 | 24.2 | 0 | 15.0 | 25.2 | 0 | 4.0 (21) | 10.0 (30) |
| Technical diploma | 10.6 | 8.1 | 0 | 7.1 | 19.2 | 9.3 | 7.1 (10) | 11.7 (35) |
| Associate degree | 8.5 | 4.8 | 0 | 5.0 (7) | 20.2 | 0 | 2.4 | 7.7 (23) |
| B.S. degree | 44.7 | 43.5 | 71.0 | 50.0 (70) | 24.2 | 28.0 | 33.3 | 29.0 (87) |
| M.S. degree | 23.4 | 19.4 | 29.0 | 22.9 (32) | 11.1 | 60.0 | 51.6 | 40.3 (121) |
| Doctoral degree | 0 | 0 | 0 | 0 | 0 | 2.7 | 1.6 | 1.3 (4) |
| Recent work on degree | 48.0 (24) | 31.1 (19) | 33.3 (10) | 37.6 (53) | 60.8 (62) | 35.6 (26) | 36.8 (46) | 44.7 (134) |
| Average teacher education courses completed | 11.1 | 9.9 | 9.3 | 10.2 | 14.3 | 8.2 | 10.6 | 10.2 |
| Average courses completed in past two years | 1.9 | 2.3 | 1.4 | 2.0 | 3.1 | 2.0 | 1.7 | 2.2 |

# Part IV
# FINDINGS: NEEDS ASSESSMENT INSTRUMENT

## INTRODUCTION

The findings for the Professional Needs Assessment Instrument are presented first for the secondary vocational teachers, supervisors, and pupils and then for the post-secondary teachers, supervisors and pupils for each of the five research questions respectively. The five criterion questions pertain to instrument (1) reliability, (2) content validity, (3) concurrent validity, (4) utility validity and (5) relative cost.

The second set of findings pertain to the Evaluation of Instruction instrument. The findings are provided in Part IV of this report. The Evaluation of Instruction instrument was also assessed in terms of the same five research objectives, namely, (1) reliability, (2) content validity, (3) concurrent validity, (4) utility validity and (5) relative cost.

## RELIABILITY

### Criterion Question #1

Are there differences among the three participating states in terms of the reliability of the rating of secondary and post-secondary teachers, supervisors, and pupils to a Professional Needs Asessment Instrument as estimated by Cronbach's alpha test of internal consistency.

Table 6 shows the Internal Consistency coefficients for secondary school vocational teachers, supervisors, and pupils for each of 11 separate scales and total score on the needs assessment instrument. Data are collapsed across states and only total reliability is presented for the 40 item Needs Assessment Instrument for students.

The data indicate that the needs assessment instrument produced high internal consistency coefficients for secondary students, teachers, and supervisors for each of the participating states. The coefficients ranged from a low of r = .881 to a high of r = .965 for each of the 11 scales and produced coefficients of r = .895, r = .978 and r = .987 for pupils, teachers, and supervisors respectively on the total instrument. This suggests that secondary school vocational pupils, teachers, and

Table 6

Internal Consistency Coefficients for each of 11 Scales of the Professional Needs Assessment Instrument for Secondary Students, Teachers, and Supervisors in Three States (Kentucky, Virginia, Wisconsin) (Cronbach's Alpha)

| Scale title | *Student N = 134 classes | Teacher N = 148 | Supervisor N = 153 |
|---|---|---|---|
| I. Program planning, development and evaluation (10 items) | | .891 | .932 |
| II. Instructional planning (8 items) | | .894 | .938 |
| III. Instructional techniques (25 items) | | .946 | .965 |
| IV. Personalized instruction (11 items) | | .889 | .905 |
| V. Instructional evaluation (6 items) | | .864 | .918 |
| VI. Instructional management (9 items) | | .910 | .920 |
| VII. Guidance (7 items) | | .886 | .891 |
| VIII. School-community relations (10 items) | | .881 | .890 |
| IX. Student vocational organizations (6 items) | | .944 | .950 |
| X. Professional role and development (8 items) | | .848 | .864 |
| XI. Coordination (10 items) | | .914 | .921 |
| Total instrument (110 items) | .895 | .978 | .987 |

PN2, TN7, SN6

*Students responded to a sample of 40 items; consequently, there were not enough items to compute scale coefficients.

supervisors were rating and teacher's need to improve in a very internally consistent manner.

Table 7 shows the Internal Consistency coefficients for secondary school pupils, teachers, and supervisors separately for each of the three participating states by scale scores and total scores for the Professional Needs Assessment Instrument. Internal consistency coefficients were for the most part well within the range of acceptability for secondary school pupils, teachers, and supervisors within each of the three participating states on each of the scale scores and for the total instrument. Coefficients ranged from a low of .695 in the "professional development" scale for teachers in Kentucky to a high of .972 for the "student organization scale for supervisors in Wisconsin. Most coefficients for teachers and supervisors on each of the 11 scales were r = .85 or above; only four coefficients were r = .75 or below for any group of teachers or supervisors on any scale. The total instrument produced coefficients all above r = .882 for pupils, teachers, and supervisors in the three participating states.

Table 8 shows the Internal Consistency Coefficients for post-secondary pupils, teachers, and supervisors combined for the three participating states for each of the 11 scales of the instrument and for the total instrument.

The reliability coefficients for postsecondary participants ranged from a low of r = .833 to a high of r = .961 for the 11 instrument scales. Most of the scale score coefficients for teachers and supervisors were r = .975 or above. The coefficients for the total instrument for all post-secondary pupils, teachers, and supervisors were r = .925, r = .977, and p = .985 respectively. The scales for the instrument were shown to have high reliability for the combined group of post-secondary pupils, teachers, and supervisors.

Table 9 shows the coefficients of Internal Consistency for the post-secondary pupils, teachers, and supervisors for each of the three states for the 11 scales and total score for the Professional Needs Assessment Instrument. Almost all of the coefficients for teachers and supervisors were r = .800 and for most were r = .900 or higher for each of the scales and for the total instrument.

The reliability of the total instrument was above r = .920 for students, teachers, and supervisors in all three states.

Table 7

Internal Consistency Coefficients for the Professional Needs Assessment Instrument for Secondary Vocational Pupils, Teachers and Supervisors in Three States

| Scale title | Kentucky | | | Virginia | | | Wisconsin | | |
|---|---|---|---|---|---|---|---|---|---|
| | P N=49 Classes | T N=52 | S N=53 | P N=54 Classes | T N=66 | S N=67 | P N=31 Classes | T N=30 | S N=33 |
| I. Program planning, development and evaluation (10 items) | | .838 | .836 | | .885 | .949 | | .924 | .912 |
| II. Instructional planning (8 items) | | .789 | .934 | | .941 | .953 | | .837 | .859 |
| III. Instructional techniques (25 items) | | .896 | .962 | | .969 | .965 | | .928 | .863 |
| IV. Personalized instruction (11 items) | | .839 | .890 | | .935 | .882 | | .827 | .928 |
| V. Instructional evaluation (6 items) | | .778 | .912 | | .922 | .932 | | .753 | .871 |
| VI. Instructional management (9 items) | | .845 | .934 | | .947 | .904 | | .873 | .924 |
| VII. Guidance (7 items) | | .796 | .793 | | .947 | .923 | | .762 | .895 |
| VIII. School-community relations (10 items) | | .874 | .872 | | .899 | .885 | | .819 | .921 |
| IX. Student vocational organizations (6 items) | | .918 | .954 | | .958 | .935 | | .957 | .972 |
| X. Professional role and development (8 items) | | .695 | .846 | | .894 | .835 | | .851 | .924 |
| XI. Coordination (10 items) | | .871 | .828 | | .923 | .923 | | .947 | .891 |
| Total instrument (110 items) | .889 | .952 | .981 | .882 | .987 | .987 | .925 | .971 | .986 |

SN2, TN7, SN6

Table 8

Internal Consistency Coefficients of the Professional Needs Assessment Instrument for Post-Secondary Students, Teachers and Supervisors for All States (Kentucky, Virginia, Wisconsin) (Cronbach's Alpha)

| Scale title | *Student N = 284 Classes | Teacher N = 307 | Supervisor N = 307 |
|---|---|---|---|
| I. Program planning, development and evaluation (10 items) | | .893 | .933 |
| II. Instructional planning (8 items) | | .876 | .933 |
| III. Instructional techniques (25 items) | | .933 | .959 |
| IV. Personalized instruction (11 items) | | .846 | .915 |
| V. Instructional evaluation (6 items) | | .875 | .889 |
| VI. Instructional management (9 items) | | .864 | .894 |
| VII. Guidance (7 items) | | .878 | .921 |
| VIII. School-community relations (10 items | | .890 | .921 |
| IX. Student vocational organizations (6 items) | | .907 | .961 |
| X. Professional role and development (8 items) | | .833 | .839 |
| XI. Coordination (10 items) | | .891 | .830 |
| Total instrument (110 items) | .925 | .977 | .985 |

PN2, TN7, SN6

*Students responded to a sample of 40 items; consequently, there were not enough items to compute scale coefficients.

Table 9

Internal Consistency Coefficients for the Professional Needs Assessment Instrument for Post-Secondary Vocational Pupils, Teachers and Supervisors in Three States

| | Scale title | Kentucky P N=94 Classes | Kentucky T N=101 | Kentucky S N=104 | Virginia P N=71 Classes | Virginia T N=78 | Virginia S N=60 | Wisconsin P N=119 Classes | Wisconsin T N=128 | Wisconsin S N=143 |
|---|---|---|---|---|---|---|---|---|---|---|
| I. | Program planning, development and evaluation (10 items) | | .875 | .911 | | .905 | .928 | | .838 | .942 |
| II. | Instructional planning (8 items) | | .864 | .912 | | .907 | .950 | | .852 | .930 |
| III. | Instructional techniques (25 items) | | .904 | .946 | | .956 | .960 | | .929 | .961 |
| IV. | Personalized instruction (11 items) | | .801 | .834 | | .874 | .907 | | .848 | .930 |
| V. | Instructional evaluation (6 items) | | .869 | .869 | | .908 | .936 | | .845 | .963 |
| VI. | Instructional management (9 items) | | .875 | .861 | | .864 | .823 | | .857 | .919 |
| VII. | Guidance (7 items) | | .863 | .831 | | .908 | .865 | | .867 | .959 |
| VIII. | School-community relations (10 items) | | .860 | .849 | | .906 | .906 | | .891 | .946 |
| IX. | Student vocational organizations (6 items) | | .924 | .971 | | .890 | .872 | | .900 | .947 |
| X. | Professional role and development (8 items) | | .803 | .823 | | .884 | .867 | | .799 | .845 |
| XI. | Coordination (10 items) | | .897 | .829 | | .913 | .908 | | .803 | .784 |
| | Total instrument (110 items) | .930 | .972 | .981 | .929 | .981 | .983 | .920 | .976 | .988 |

SN2, TN7, SN6

## Summary

Based on the data provided for secondary and post-secondary vocational pupils, teachers, and supervisors, it seems apparent that the scale scores and total instrument have high internal consistency reliability within and among the three participating states. The answer to the initial criterion question is that there is substantially no difference among the three states in terms of the reliability of secondary or post-secondary pupil, teacher, and supervisor ratings of professional needs of vocational instructors. All participiments were responding in a very consistent manner implying that they understood the directions, were responding accordingly, and rated teachers differently using the full range of the seven point Likert scale.

# CONTENT VALIDITY

## Criterion Question #2

Are their differences among the three participating states in terms of the proportion of secondary and post-secondary vocational pupils, teachers and supervisors who rated the tasks on the professional needs assessment instrument as being relevant to the role of the teacher as estimated by the frequency and presence of tasks?

The content validity of the Professional Needs Assessment Instrument was assessed for the secondary and post-secondary teachers, supervisors, and pupils in each of the three participating states. The teacher and supervisor instrument contained 110 statements which were judged first on the basis of whether the task was a competency that was perceived to be part of the teacher's job and secondarily, if it was perceived as a part of their job, how much need did a teacher have to go to improve on this competency as perceived by the self-rating of teachers, supervisor ratings of teachers, and student ratings of teachers. The student instrument contained a total of 40 statements which included at least two statements for each of the 11 scales of the teacher/supervisor instrument. The teacher/supervisor instrument contained 110 items.

Content validity was assessed by the proportion of "yes" - "no" responses given by at least 60% of the teachers, supervisors, and pupils to the general question: "Is this an important task teachers do or should perform as part of their required teaching responsibility?" The greater the proportion of "yes" responses, the greater the content validity of the items. However, because the needs assessment instrument contained many items with a teacher may be performing now and/or those which they may wish to perform at sometime in the future, it was

anticipated that not all tasks would be judged to be equally relevant to each teacher. Therefore, a criterion of a 60% response was developed to establish the content validity for each item. The purpose of the data for content validity for teachers is presented, and discussed in three ways: (1) aggregate data by scale across all three states, (2) differences between secondary and post-secondary teachers for scales across the three states, and (3) differences among states by scales and secondary and post-secondary levels of education. Similar interpretations were also presented for supervisor and pupils ratings of teachers relative to the content validity of the Needs Assessment Instruments.

Teacher Ratings

Based on the combined totals for secondary vocational teachers on the 110 items of the Needs Assessment Instrument, as judged by at least 60% of all teachers. Table 10 shows that about 81% of the items were judged to be relevant to the role of secondary instructors across the three states, but only about 76% were relevant for post-secondary instructors. Some of the tasks and scale items appear to be more relevant to secondary teachers than they do to post-secondary instructors.

Look at the 11 scales of the instrument for the total group of secondary and post-secondary teachers, secondary and post-secondary teachers agree that the items pertaining to: (a) instructional planning, (b) instructional evaluation, and (c) counseling, are relevant to their teaching role. There also appears to be high agreement (80-90%) that the scales of: (a) program planning, (b) instructional techniques, and (c) personalized instruction are also related to their teaching role. Generally speaking, the items pertaining to student organizations were perceived to be more relevant to secondary teachers than post-secondary teachers, but neither group judged the items dealing with coordination as being relevant to their teaching responsibilities. Only about 63% of the secondary and post-secondary teachers judged the items concerning professional role development as being relevant to their professional teaching responsibilities.

Teacher ratings within the kthree states differed with respect to the relevance of the 110 items of the instrument. For example about 83% and 86% of the total group of secondary and post-secondary teachers respectively in Kentucky rated the 110 items as relevant, but 64% and 69% of the total 110 items were judged relevant by secondary and post-secondary instructors respectively in Wisconsin. Apparently the

Table 11

Number of Items Perceived as Relevant By At Least 60% of Secondary and Post-Secondary Teachers on 110 Item Professional Needs Assessment Instrument in Three States

| Scale | Name | Ky | | | | Va | | | | Wi | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sec | % | P-S | % | Sec | % | P-S | % | Sec | % | P-S | % | Sec | % | P-S | % |
| I. | Program planning, development and evaluation (10 items) | 9 | 90% | 10* | 100% | 10* | 100% | 10* | 100% | 3 | 30% | 4 | 40% | 9 | 90% | 9 | 90% |
| II. | Instructional planning (8 items) | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% |
| III. | Instructional techniques (25 items) | 23 | 92% | 25* | 100% | 24 | 96% | 23 | 92% | 22 | 88% | 23 | 92% | 23 | 92% | 23 | 92% |
| IV. | Personalized instruction (11 items) | 9 | 82% | 10 | 90% | 10 | 91% | 9 | 82% | 8 | 73% | 9 | 82% | 9 | 82% | 10 | 91% |
| V. | Instructional evaluation (6 items) | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% |
| VI. | Instruction management (9 items) | 8 | 89% | 8 | 89% | 8 | 89% | 5 | 55% | 7 | 78% | 7 | 78% | 8 | 89% | 6 | 67% |
| VII. | Guidance (7 items) | 7* | 100% | 7* | 100% | 7* | 100% | 7* | 100% | 7* | 100% | 7* | 100% | 7* | 100% | 7* | 100% |
| VIII. | School-community relations (10 items) | 9 | 90% | 9 | 90% | 8 | 80% | 9 | 90% | 4 | 40% | 5 | 50% | 8 | 80% | 6 | 60% |
| IX. | Student vocational organizations (6 items) | 6* | 100% | 4 | 67% | 6* | 100% | 1 | 16% | 0 | 0% | 2 | 33% | 6* | 100% | 2 | 33% |
| X. | Professional role and development (8 items) | 5 | 63% | 5 | 63% | 5 | 63% | 5 | 63% | 5 | 63% | 5 | 63% | 5 | 63% | 5 | 63% |
| XI. | Coordination (10 items) | 1 | 9% | 3 | 27% | 0 | 0% | 4 | 40% | 0 | 0% | 0 | 0% | 0 | 0% | 2 | 20% |
| | Total instrument Total percent (110 items) | 91 | 83% | 95 | 86% | 92 | 84% | 87 | 79% | 70 | 64% | 76 | 69% | 89 | 81% | 84 | 76% |

* All items in this scale were perceived as relevant.

expectations of teachers in Wisconsin are perceived to be quite different than teachers in the other two states.

By looking at the items by scales, items pertaining to program planning and school community relations were not perceived to be as relevant to secondary or post-secondary teachers in Wisconsin as they were for teachers in Kentucky or Virginia. Only a few of the items dealing with coordination were judged to be relevant to teachers in any of the three states. The teachers in Wisconsin generally do not see as much relevance of the items pertaining to student organizations as do teachers in the other two states.

From these data, it is possible to suggest that at the time the instrument was administered to secondary and postsecondary vocational teachers in the three states, only about 75%-80% of the items were judged to be immediately relevant for at least 60% of the teachers. There was general agreement that the items in about four of the needs assessment scales were equally relevant to teachers in each of the three states. Yet, on other scales there seemed to be significant differences among the three states which may be a function of real differences in the assignments of teachers or differences in the way in which secondary and post-secondary vocational education is implemented/emphasized in the three states. These data may also suggest that some concepts (e.g., coordination, student organizations, professional roles) could be eliminated from the instrument or at least revised.

Supervisor Rating

Table 11 shows the number and percent of 110 professional needs assessment items judged as relevant for the secondary and post-secondary supervisors in each of the three participating states as judged by at least 60% of the supervisors of teachers.

Looking at combined totals for supervisor ratings in three states, about 86% of the statements were judged relevant for secondary teachers and only 72% were judged as relevant to post-secondary instructors. There seemed to be general agreement that the scales of: (a) instructional planning, (b) instructional evaluation, and (c) instructional techniques were equally relevant to both secondary and post-secondary teachers in each of the three states, followed by general agreement on such scales

Table 11

Number of Items Perceived as Relevant By At Least 60% of Secondary and Post-Secondary Supervisors on 110 Item Professional Needs Assessment Instrument in Three States

| | | KY | | | | VA | | | | WI | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sec | % | P-S | % | Sec | % | P-S | % | Sec | % | P-S | % | Sec | % | P-S | % |
| I. | Program planning development and evaluation (10 items) | 9 | 90% | 9 | 90% | 9 | 9% | 4 | 40% | 10* | 100% | 6 | 60% | 10* | 100% | 4 | 40% |
| II. | Instructional planning (8 items) | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% | 8* | 100% |
| III. | Instructional techniques (25 items) | 25* | 100% | 24 | 96% | 23 | 92% | 21 | 84% | 25* | 100% | 25* | 100% | 24 | 96% | 24 | 96% |
| IV. | Personalized instruction (11 items) | 6 | 55% | 9 | 82% | 11* | 100% | 6 | 55% | 10 | 91% | 10 | 91% | 11* | 100% | 9 | 82% |
| V. | Instructional evaluation (6 items) | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% | 6* | 100% |
| VI. | Instructional management (9 items) | 8 | 89% | 9* | 100% | 8 | 89% | 6 | 67% | 9* | 100% | 7 | 78% | 8 | 89% | 9* | 100% |
| VII. | Guidance (7 items) | 5 | 71% | 6 | 85% | 7* | 100% | 6 | 85% | 7* | 100% | 7* | 100% | 7* | 100% | 7* | 100% |
| VIII. | School-community/ relations (10 items) | 9 | 90% | 6 | 60% | 7 | 70% | 4 | 40% | 9 | 90% | 6 | 60% | 8 | 80% | 6 | 60% |
| IX. | Student vocational organizations (6 items) | 0 | 0% | 6* | 100% | 6* | 100% | 0 | 0% | 6* | 100% | 2 | 33% | 6* | 100% | 1 | 17% |
| X. | Professional role and development (8 items | 5 | 63% | 6 | 75% | 5 | 63% | 5 | 63% | 8* | 100% | 5 | 63% | 5 | 63% | 5 | 63% |
| XI. | Coordination (10 items) | 1 | 10% | 2 | 20% | 0 | 0% | 1 | 10% | 10* | 100% | 0 | 0% | 1 | 10% | 0 | 0% |
| | Total instrument (110 items) Total % relevance | 82 | 75% | 91 | 83% | 90 | 82% | 67 | 61% | 108 | 98% | 82 | 75% | 94 | 86% | 79 | 72% |

* All items in this scale were perceived as relevant.

as: (a) program planning, (b) personalized instruction, (c) guidance, (d) instructional management, and (e) student organizations. Supervisors within the three states did, however, differ with respect to the relevance of the items by educational level. Secondary vocational supervisors were much more concerned about youth organizations than supervisors in post-secondary vocational programs.

Supervisors also differ in terms of the perceived relevance of the items to a teacher's job with respect to secondary and post-secondary teachers and by scales within the 110 item instrument. For example, 98% of the 110 items were judged to be relevant for the secondary teachers in Wisconsin, while only 75% were judged as relevant for post-secondary teachers in Wisconsin. In general the statements seemed to be more relevant to secondary teachers than postsecondary teachers. There seemed also to be quite large differences among supervisors in the three states in regard to items concerning: (a) student organizations (0 - 100%, (b) coordination in Wisconsin (10% - 100%), and (c) personalized instruction (55% - 100%).

From these data it can be concluded that supervisors perceive that about (a) 75-85% of the items were relevant to the secondary and post-secondary teacher in each of the three states, (b) the items seem generally more relevant to secondary than post-secondary teachers, (c) supervisor ratings among the three states differ in terms of the perceived relevance of items of the 11 scales of the 110 item instrument. This may suggest that some items should be eliminated/modified or that separate instruments need to be developed for secondary and post-secondary teachers.

In comparing the responses of teachers and supervisors, it seems apparent that supervisors have quite different job expectations for teachers than teachers have of their own job. Both secondary and post-secondary teachers place greater emphasis on guidance related activities than do supervisors. Neither teachers nor supervisors see the relevance of: (a) coordination activities or (b) professional development activities. While there are differences between the two sets of ratings, the differences are most evident when looking at secondary and post-secondary ratings within each state.

Pupil Ratings

The content validity of the 40 item student instrument was assessed by the proportion of students who indicated that a statement was relevant to the teacher's job responsibility. There were a total of 11 scales in the 110 item instrument. For the student instrument, at least two appropriate items were selected for each of the 11 scale.

The data shown in Table 12 represent the ratings of secondary and post-secondary students in three states to each item on the 40 item instrument, where at least 60% of the students rated the items' relevance to the teachers' responsibilities. The data for the total group of students across the three states indicate that about 85% of the 40 items were judged to be relevant by at least 60% of the secondary students, but only 78% were judged relevant by post-secondary students. There appeared to be some differences among the ratings of secondary and postsecondary students in the three states, but these differences were not large. The percentage of items judged to be relevant by at least 60% of the students ranged from a low of 25 items (63%) for post-secondary students in Virginia to a high of 85% (34 items) for post-secondary students in Kentucky.

Table 12

Number of Items Perceived as Relevant
By At Least 60% of Students On The
40 Item Professional Needs
Assessment Instrument

| | KY | | VA | | WI | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Sec N=1096 | P-S N=794 | Sec N=778 | P-S N=876 | Sec N=551 | P-S N=1682 | Sec N=2425 | P-S N=3352 |
| Total 40 items | 32 | 34 | 33 | 25 | 30 | 28 | 34 | 31 |
| Percent of items | 80% | 85% | 83% | 63% | 75% | 70% | 85% | 78% |

It can therefore be concluded that there were some differences in the ratings among the secondary and post-secondary students in three states

as to the relevance of the items regarding teaching responsibilities. However, about 80-85% of the items were judged as relevant. This may suggest real differences between secondary and post-secondary teacher responsibilities among the three states, or it may suggest that items may have to be revised for secondary and post-secondary teachers respectively.

## CONCURRENT VALIDITY

### Criterion Question #3

Are there differences among the three participating states in terms of the amount of agreement among the ratings of secondary and post-secondary school pupils, teachers, and supervisors or teachers on a Professional Needs Assessment Instrument?

It was hypothesized that if the ratings of teachers, pupils, and supervisors were accurately measuring the same construct of professional needs, then there should be relatively high agreement among the ratings of teachers, supervisors, and pupils' rating of needs assessment items. In order to assess the extent of agreement, Pearson product moment correlation were computed between teacher and supervisor ratings on the 110 item needs assessment instrument and for each of the 11 scales of the instrument. Student ratings, however, were correlated only with the total teacher and supervisor ratings because of the length of the 40 item pupil instrument.

Table 13 shows the Pearson product moment correlation by scale score and total instrument score for secondary pupils, teachers and supervisors in each of the three participating states and for the three states combined.

Looking first at the combined data for the three states, only three of the 11 scale scores were significantly different from zero for the teacher and supervisor ratings. The correlation of pupil ratings with teacher and supervisor ratings were not significantly different from zero, thus indicating very little agreement among these ratings on the total instrument score. This may be due to two factors: (a) students do not perceive the needs of the teacher in the same way as teachers and supervisors or (b) a 40 item instrument is not long enough to adequately sample

Table 13

Pearson Product Correlations for Scale and Total Needs Assessment Scores for Secondary Vocational Pupils, Teachers and Supervisor in Kentucky, Virginia and Wisconsin

| Scales | Item | Kentucky teacher/supervisor N | Kentucky r | Virginia teacher/supervisor N | Virginia r | Wisconsin teacher/supervisor N | Wisconsin r | Combined states teacher/supervisor N | Combined states r |
|---|---|---|---|---|---|---|---|---|---|
| 1) Planning & evaluating program development | 18 | 78 | *.3111 | 31 | -.1405 | 45 | -.0861 | 154 | |
| 2) Instructional planning | 25 | 89 | .1805 | 52 | *.3289 | 105 | .0456 | 240 | *.1540 |
| 3) Instructional techniques | 11 | 90 | .1092 | 54 | .2372 | 96 | .2372 | 240 | .0907 |
| 4) Personalized Instructor | 6 | 85 | .1666 | 30 | .2242 | 85 | -.0677 | 200 | .0632 |
| 5) Instructional evaluation | 9 | 97 | .0751 | 57 | .2608 | 104 | .0295 | 255 | .1083 |
| 6) Instructional management | 7 | 91 | .0805 | 28 | -.0267 | 68 | -.0004 | 187 | .0119 |
| 7) Guidance | 10 | 92 | -.0655 | 30 | .0382 | 92 | .0258 | 214 | -.0136 |
| 8) School/community relations | 6 | 66 | -.0159 | 25 | .1167 | 46 | .0693 | 137 | .0091 |
| 9) Student youth organization | | 50 | *.3955 | 10 | .3398 | 43 | .0307 | 103 | *.2371 |
| 10) Professional development role | 8 | 83 | .0631 | 49 | .0831 | 86 | -.1346 | 218 | -.0209 |
| 11) Coordination | 10 | 32 | -.2537 | 4 | -.2543 | 8 | -.0842 | 45 | -.1912 |
| Total | 110 | 39 | .3054 | 4 | 1.00 | | *-.3985 | 69 | .1912 |
| Pupils total scores | 40 | N= 54 | N=71 | N=62 | N=36 | N=56 | N=43 | N=116 | N=150 |
| | | r=.1715 | r=*.2571 | r=.2611 | r=*.4297 | r=.0978 | r=.1428 | r=.1531 | r=*.1796 |

the extent of agreement. At this time, there is no way to tell which statement is most correct. The scales on which there seems to be general agreement of teachers and supervisors are: (a) instructional planning, (b) personalized instruction and (c) guidance.

Only one of the scales for teachers and supervisors in Kentucky and Virginia were significantly different from zero: (1) student youth groups and (2) personalized instruction. None of the remaining scales for teachers, supervisors or pupils were statistically different from zero for secondary personnel in the three states.

Because some of the scales had negative correlation coefficients, it seems obvious that teachers and supervisors have quite different perceptions of what the needs of teachers are and where improvements are to be made. For example, supervisors and teachers appear to have quite different perceptions of the teacher's role in program planning and development in Kentucky and Virginia than teachers in Wisconsin. Similarly, teachers and supervisors have different perceptions when it comes to need to improve in areas like: (a) instructional management, (b) student youth groups, (c) professional development. In general, there seems to be little agreement of secondary teachers or supervisors on the total instrument in the state of Kentucky and Wisconsin. Assuming that these differences are real differences, there obviously are differences in the perceptions of teachers and supervisors as to areas of responsibility which are important for teachers. Hence, any resolution of these differences, need to be made explicit and discussed or it is possible that potential problems may exist for a continuing harmonious relationship between supervisor and teacher.

Table 14 shows the Pearson product moment correlation coefficients for the post-secondary pupils, teachers and supervisors in the three participating states by scale, score and total instrument score.

For the combined states, only three scores were statistically significant from zero in terms of teacher-supervisor ratings and supervisor/pupil ratings. They were: (a) instructional planning ($r = .1540$), (b) student youth groups ($r = .2371$) and (c) supervisor/pupil ratings of the total instrument ($r = .1796$).

Four of the scales showed negative correlations indicating that teachers and supervisors had quite different perceptions of what was most

Table 14

Pearson Product Correlations for Scale and Total Needs Assessment Scores for Post-Secondary Vocational Pupils, Teachers and Supervisors in Kentucky, Virginia and Wisconsin

| Scales | Item | Kentucky teacher/supervisor N | r | Virginia teacher/supervisor N | r | Wisconsin teacher/supervisor N | r | Combined states teacher/supervisor N | r |
|---|---|---|---|---|---|---|---|---|---|
| 1) Planning & evaluating program development | 18 | 32 | -.0796 | 32 | -.0691 | 17 | .1937 | 81 | .1900 |
| 2) Instructional planning | 25 | 44 | .1112 | 39 | .1829 | 25 | .0485 | 13 | *1885 |
| 3) Instructional techniques | 11 | 46 | .1619 | 36 | .2385 | 24 | .0079 | 106 | .1708 |
| 4) Personalized instruction | 6 | 36 | .0685 | 34 | *.3380 | 21 | .0329 | 91 | *.2550 |
| 5) Instructional evaluation | 9 | 50 | .0509 | 37 | .1811 | 27 | .0162 | 14 | .1322 |
| 6) Instructional management | 7 | 45 | .1931 | 32 | .0916 | 23 | -.0149 | 100 | .1548 |
| 7) Guidance | 10 | 45 | .0785 | 37 | .1004 | 25 | .1856 | 107 | *.2150 |
| 8) School/community relations | 6 | 36 | .1695 | 30 | .2919 | 14 | .1505 | 80 | .0239 |
| 9) Student youth organization | | 24 | *.5709 | 30 | .0591 | 10 | -.3038 | 64 | .1754 |
| 10) Professional development role | 8 | 44 | .0049 | 35 | .0267 | 23 | -.1705 | 102 | -.0224 |
| 11) Coordination | 10 | 17 | .0347 | 10 | .3055 | 9 | .1795 | 36 | .2470 |
| Total | 110 | 20 | -.1335 | 25 | .0741 | 25 | -.5982 | 51 | .0898 |
| Pupils total scores | 40 | N=24 | N=33 | N=31 | N=27 | N=25 | N=8 | N=85 | N=75 |
| | | r=.0872 | r=.3171 | r=.1147 | r=.1759 | r=.3764 | r=-.5186 | r=.2010 | r=.1811 |

*Significant at .05 level

important to a teacher. These were in the area of: (a) program planning and evaluation, (b) guidance, (c) professional development and (d) coordination. Apparently teachers feel that they need more or less improvement in these areas than do their supervisors. This establishes potential disagreements between the two groups of raters which should be clarified through systematic communication and sharing of information for resolution of these differences.

There appear to be some similarities and some differences in the amount of agreement of post-secondary vocational teacher, supervisor and pupil ratings within and among the three states. For example, significant agreement was observed within the State of Kentucky on two scales (planning and student youth organizations) while also producing three negative correlations between teacher and supervisor ratings: (a) guidance, (b) school community relations, and (c) coordination.

Within the States of Virginia and Wisconsin, significant agreement was observed on only one scale: (1) planning and total test score respectively. Also within Virginia, three of the scales produced negative correlations while in the State of Wisconsin, four negative scale score correlations were observed as well as a negative agreement of the total test score. It appears that there seems to be less agreement among secondary vocational teachers and supervisors among personnel in Wisconsin than in the other two states.

Significant correlations between supervisor and pupils ratings were observed in the States of Kentucky and Virginia and the supervisor and pupil rating for the combined data for the three states. The supervisor/pupil ratings in Wisconsin produced a negative correlation. Again, it would appear that there is less agreement among the post-secondary pupils, teachers and supervisors in Wisconsin than for the other two states.

The general conclusion seems to be that the Needs Assessment Instrument may not have a high degree of concurrent validity for post-secondary school personnel as assessed by the extent of correlation among ratings. There do appear to be some tasks on which the pupils, teachers and supervisors can agree (significant correlation) and several in which there is negative agreement. For the most part, the findings strongly suggest that teachers tend to have quite different perceptions of their professional needs and their job perception than either their supervisors or pupils.

In conclusion, the needs assessment instrument does not appear to have a high degree of concurrent validity for secondary or post-secondary pupils, teachers and supervisors in the three participating states. While most of the correlations were positive, only a few were statistically significant from zero for secondary or post-secondary pupils, teachers, and supervisors. In fact, several of the teacher/supervisor ratings were negatively correlated as well as some pupil/supervisor ratings.

These data tend to lead to the ultimate conclusion that based on the ratings of secondary and post-secondary personnel in the three states, the teachers have quite different perceptions of their professional needs as they relate to their teaching role than either pupils or supervisors. If these are real differences, then expectations of teachers should change or teachers competencies must be improved to better meet the expectations of pupils and supervisors.

## UTILITY VALIDITY

### Criterion Question #4

Are there differences among the three participating states in terms of the ratings of secondary and post-secondary teachers and supervisors as to the utility or usefulness of the computer feedback data concerning the Professional Needs Assessment Instrument for accurately planning a program of professional improvement.

Utility validity was defined as the potential usefulness of the indi-individual computer feedback information as a means to facilitate planning a program of staff development. Usefulness was judged on the basis of answers to four questions as judged by secondary and post-secondary teachers and supervisors respectively.

Table 15 shows the data for each of the three states separately and the aggregate data for the responses of secondary vocational instructors to four questions concerning the potential usefulness of the data and the computer feedback data for developing a program of professional development.

The responses of secondary vocational teachers indicated that: (a) about 77% of them believed the data were accurate, (b) 79% believed the data would be helpful in planning a professional development program, and (c) 92% believed student responses would assist in planning professional growth activities, and (d) about 80% thought supervisor ratings would be helpful.

Table 15

Usefulness of the Professional Needs Assessment Instruments
For Planning Professional Development of Teachers
As Perceived by Secondary Teachers

| Key: % (N) | KY Yes | KY No | VA Yes | VA No | WI Yes | WI No | Total Yes | Total No |
|---|---|---|---|---|---|---|---|---|
| Accurate assessment of your strengths and concerns? | 84.3 (43) | 15.7 (8) | 70.5 (43) | 29.5 (18) | 76.7 (23) | 23.3 (7) | 76.8 (109) | 23.2 (33) |
| Would self-ratings help in planning? | 86.0 (43) | 14.0 (7) | 72.1 (44) | 27.9 (17) | 83.3 (25) | 16.7 (5) | 79.4 (112) | 20.6 (29) |
| Would student ratings help in planning? | 94.0 (47) | 6.0 (3) | 86.0 (53) | 13.1 (8) | 100.0 (30) | 0.0 (0) | 92.2 (130) | 7.8 (11) |
| Would supervisors ratings help in planning? | 86.0 (43) | 14.0 (7) | 77.0 (47) | 23.0 (14) | 76.7 (23) | 23.9 (28) | 80.1 (113) | 19.9 (28) |

TN7, #1-4 (please refer to items at end of Teacher Form for exact wording of items.)

While there were some differences among the three states, the findings were similar to those previously discussed: 70%-80% indicated the data were accurate, (b) 72%-86% indicated data would be useful for planning, and (c) 86%-100% believed student ratings were of more value than supervisor ratings of their performance.

Table 16 presents the data for supervisors of secondary teachers concerning the usefulness of these data for planning or program of professional improvement for each of the three states and combined across states.

Again supervisors believed the ratings they provided for teachers was about: (a) 82% accurate for assessing the competencies/professional needs of teachers, (b) would be useful for planning a program of staff development (80%), (c) believed student assessment of teacher's performance to be very important for teachers (91%) and (d) believed their ratings of teachers to be less useful than student data (75%) but still important.

Based on the data provided for secondary school teachers and supervisors, it seems reasonable to conclude that a majority of teachers and supervisors within the three states believe that: (a) the needs assessment

Table 16

Usefulness of the Professional Needs Assessment Instruments for Planning Professional Development of Teachers As Perceived by Secondary Supervisors

| Key: % (N) | KY Yes | KY No | VA Yes | VA No | WI Yes | WI No | Total Yes | Total No |
|---|---|---|---|---|---|---|---|---|
| Accurate assessment of instructor's strengths and concerns? | 82.7 (43) | 17.3 (9) | 88.1 (59) | 11.9 (8) | 65.6 (21) | 24.4 (11) | 81.5 (123) | 18.5 (28) |
| Would teacher self-ratings help in planning? | 67.3 (35) | 32.7 (17) | 80.6 (54) | 19.4 (13) | 100.0 (32) | 0.0 (1) | 80.1 (121) | 19.9 (30) |
| Would student ratings help in planning? | 98.1 (51) | 1.9 (1) | 82.1 (55) | 17.9 (12) | 100.0 (32) | 0.0 (0) | 91.4 (138) | 8.6 (13) |
| Would supervisor ratings help in planning? | 75.0 (39) | 25.0 (13) | 80.6 (54) | 19.4 (13) | 60.7 (17) | 39.3 (11) | 74.8 (110) | 25.2 (37) |

SN6, #1-4 (Please refer to items at end of Supervisor Form for exact wording of items.)

data are accurate, (b) would be helpful for professional improvement of teachers, (c) believe student data to be the single most helpful data for professional planning, and (d) perceive supervisor data as helpful, but not as important as student data.

Tables 17 and 18 presents the same type of data for postsecondary school vocational instructors and supervisors for each of the three states separately and for the three states in total.

The findings are very similar to those described for the secondary school vocational teachers and supervisors: (a) about 77% of all teachers and 82% of supervisors believe the needs assessment data was an accurate assessment of the teacher's need to improve in certain professional tasks, (b) about 82% of teachers and supervisors believed the data to be useful for the professional planning of teachers, (c) about 92-100% of teachers and supervisors agreed that student data was very important for assessing the capabilities of the teachers, but (d) only 75%-80% of teachers and supervisors believed supervisor ratings of teachers would be important for developing a plan for professional improvement.

Table 18

Usefulness of the Professional Needs Assessment Instruments

for Planning Professional Development of Teachers

As Perceived by Post-Secondary Teachers

| Key: % / (N) | KY | | VA | | WI | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No | Yes | No |
| Accurate assessment of your strengths and concerns? | 65.7 (63) | 34.3 (34) | 69.7 (53) | 30.3 (23) | 67.5 (81) | 32.5 (39) | 67.5 (199) | 32.5 (96) |
| Would self-ratings help in planning? | 65.7 (65) | 34.3 (34) | 74.7 (56) | 25.3 (19) | 73.6 (89) | 26.4 (32) | 71.2 (210) | 28.2 (85) |
| Would student ratings help in planning? | 78.8 (78) | 21.2 (21) | 90.8 (69) | 9.2 (7) | 91.0 (112) | 8.9 (11) | 86.9 (259) | 13.1 (39) |
| Would supervisor ratings help in planning? | 72.7 (72) | 27.3 (27) | 84.0 (63) | 16.0 (12) | 76.1 (89) | 23.9 (28) | 77.0 (224) | 23.0 (67) |

TN7, #1-4 (Please refer to items 1-4 at end of Teacher Form for exact wording of items.)

Table 18

Usefulness of the Professional Needs Assessment Instruments

for Planning Professional Development of Teachers

As Perceived by Post-Secondary Supervisors

| Key: % / (N) | KY | | VA | | WI | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No | Yes | No |
| Accurate assessment of instructor's strengths and concerns? | 80.2 (77) | 19.8 (19) | 62.1 (36) | 37.9 (22) | 83.0 (112) | 17.0 (23) | 77.9 (225) | 22.1 (64) |
| Would teacher self-ratings help in planning? | 83.3 (80) | 16.7 (16) | 98.3 (59) | 1.7 (1) | 86.7 (117) | 13.3 (18) | 88.0 (256) | 12.0 (35) |
| Would student ratings help in planning? | 95.8 (92) | 4.2 (4) | 96.7 (58) | 3.3 (2) | 96.3 (130) | 3.7 (5) | 96.2 (280) | 3.8 (11) |
| Would supervisor ratings help in planning? | 87.5 (84) | 12.5 (12) | 79.3 (46) | 20.7 (12) | 96.0 (96) | 4.0 (4) | 89.0 (226) | 11.0 (28) |

SN6, #1-4 (Please refer to items 1-4 at end of Supervisor Form for exact wording of items.)

Based on these data, it seems reasonable to conclude that a majority of the secondary and post-secondary teachers and supervisors agree that the data are accurate, would be useful for staff development planning and believe student data for the most part would be of greater value to a teacher than supervisor data.

There appeared to be relatively few differences among the three states in terms of responses of secondary school teacher/supervisors and post-secondary teachers/supervisors. Thus, it seems reasonable to conclude that for a majority of secondary and postsecondary teachers and supervisors, that the computerized feedback of the professional needs assessment data would be a valuable aid for helping teachers develop an individualized plan of continued professional growth and development.

## RELATIVE COSTS

### Criterion Question #5

Are there differences among the three participating states in terms of the relative cost for implementing a Professional Needs Assessment Instrument for secondary and post-secondary vocational pupils, teachers, and supervisors?

Relative costs for administering the Professional Needs Assessment Instruments and the Evaluation of Instruction Instruments to secondary and post-secondary vocational pupils, teachers, and supervisors in the three states are provided: (a) in terms of the needs assessment instrument and, (b) the Evaluation of Instruction Instrument. This was done because either or both instruments could be used as a part of a staff development effort.

The costs reported here on each of the instruments do not include developmental costs such as: (a) staff salaries, (b) printing costs of forms, (c) computer program development, (d) printing of preprinted computer paper, and (e) indirect costs, (mailing, travel). The comparative cost data only includes those costs which an institution or state would purchase to use and implement a system of staff development. The actual or estimated costs relate to the number of pupils, teachers, and supervisors who participated in the project and consequently, the number of forms used, notebooks provided, and estimated computer time. Costs are further based on the estimated cost of printing, and computer time when

the project was initiated and probably do not reflect more recent costs of inflation.

The estimated costs include the following items together with the per unit cost of each item.

| | | |
|---|---|---|
| a. | Teacher/supervisor background information forms | .05 each |
| b. | Scoring background information form | .25 each |
| c. | Evaluating instruction forms | .05 each |
| d. | Scoring evaluation of instruction form | .25 each |
| e. | Teacher/supervisor professional needs assessment forms | .05 each |
| f. | Student needs assessment form | .05 each |
| g. | Scoring teacher, supervisor pupil forms | .25 each |
| h. | Computer feedback costs ($15/min.-approx. 1 mi .) | |
| i | Teacher/supervisor identification tables | .02 each |
| j. | Teacher/supervisor/student packet envelopes | .15 each |
| k. | Soft cover feedback costs (optional) | 3.00 each |

A previous section of this report described the types of cost information that would be provided in determining the relative costs for implementing the Needs Assessment Instruments and procedures of the staff development project. A later section of this report will provide comparable data for the Evaluation of Instruction Instrument.

Table 20 shows the expandable cost items, and their respective unit cost per item together with the separate item costs and number of individuals who participated in the study for each state and then the combined totals for all three states. Secondary and post-secondary data were combined for each state since the costs are only dependent on the number of individuals participating. For the purpose of this analysis, it was not important to provide cost data separately for secondary and post-secondary personnel.

The total number of participants are shown by state and total. However, because each student completed a form on each teacher and each supervisor completed one form for each teacher supervised, the number of forms or totals is always greater than the number of supervisors. Thus, each supervisor received a packet containing a number of forms equal to the number of teachers supervised. The column pertaining to combined data for the three states reflects the total number of materials.

the project was initiated and probably do not reflect more recent costs of inflation.

The estimated costs include the following items together with the per unit cost of each item.

| | | |
|---|---|---|
| a. | Teacher/supervisor background information forms | .05 each |
| b. | Scoring background information form | .25 each |
| c. | Evaluating instruction forms | .05 each |
| d. | Scoring evaluation of instruction form | .25 each |
| e. | Teacher/supervisor professional needs assessment forms | .05 each |
| f. | Student needs assessment forms. | .05 each |
| g. | Scoring teacher, supervisor pupil forms | .25 each |
| h. | Computer feedback costs ($15/min.-approx. 1 min.) | |
| i. | Teacher/supervisor identification tables | .02 each |
| j. | Teacher/supervisor/student packet envelopes | .15 each |
| k. | Soft cover feedback costs (optional) | 3.00 each |

A previous section of this report described the types of cost information that would be provided in determining the relative costs for implementing the needs assessment instruments and procedures of the staff development project. A later section of this report will provide comparable data for the Evaluation of Instruction Instrument.

Table 20 shows the expendable cost items, and their respective unit cost per item together with the separate item costs and numbers of individuals who participated in the study for each state and then the combined totals for all three states. Secondary and post-secondary data were combined for each state since the costs are only dependent on the number of individuals participating. For the purposes of this analyses, it was not important to provide cost data separately for secondary and post-secondary personnel.

The total number of participants are shown by state and total. However, because each student completed a form on each teacher and each supervisor completed one form for each teacher supervised, the number of forms or totals is always greater than the number of supervisors. Thus, each supervisor received a packet containing a number of forms equal to the number of teachers supervised. The column pertaining to combined data for the three states reflects the total number of materials

provided, scored and analyzed for the combined secondary and post-secondary teachers and supervisors in the study.

The total cost for administering and analyzing the needs assessment forms for secondary and post-secondary personnel in three states was $12,049.75. A total of 7,136 needs assessment forms were provided, scored and analyzed. Computer feedback reports were provided to 453 teachers and 53 supervisors in the form of soft cover notebooks. Both the needs assessment and evaluation of instruction feedback was included in one notebook and reported on preprinted computer paper.

The cost for administering the Needs Assessment Instruments in each of the three states was: Kentucky ($4,062.12), Virginia ($3,708.66) and Wisconsin ($4,248.97). The costs for the most part are quite similar for the three states with the major difference being the number of students, teachers, and supervisors participating within each state.

The major costs were for: (a) purchasing the forms (.05 each, (b) scoring the forms (.25 each, (c) analyzing the individual feedback data ($15/person) and (d) providing the feedback notebook ($3.00 each).

The general conclusion is that there are relatively little differences among the three states in terms of the relative costs for administering the needs assessment forms to secondary and post-secondary pupils, teachers, and supervisors. The average cost per teacher for the total combined group is about $24.00 per/teacher supervisors. This would include 453 feedback reports to teachers and 53 for supervisors. Data on 5,777 students were included in these reports.

The average cost for each of the three states were: $23.62, $23.47, and $24.17 for secondary and post-secondary teachers and supervisors for Kentucky, Virginia, and Wisconsin respectively.

Table 19

Comparative Costs of Secondary and Post-Secondary Vocational Pupils, Teachers and Supervisors on the Professional Needs Assessment Instrument for Three Participating States

| | | Kentucky | | | | | Virginia | | | | | Wisconsin | | | | | Combined group materials | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | P | T | S | Total N | Total cost | P | T | S | Total N | Total cost | P | T | S | Total N | Total cost | P | T | S | Total N | Total cost |
| Background form 1/teacher/ supervisor | .05 | | 152 | 20 | 172 | 8.60 | | 142 | 16 | 158 | 7.90 | | 159 | 17 | 176 | 8.80 | | 453 | 53 | 506 | 25.30 |
| Scoring 1/teacher/ supervisor | .25 | | 152 | 20 | 172 | 43.00 | | 142 | 16 | 158 | 39.50 | | 159 | 17 | 176 | 44.00 | | 453 | 53 | 506 | 126.50 |
| Evaluation instrument 1/teacher/pupil | .05 | 1890 | 152 | 152 | 2194 | 109.70 | 1654 | 142 | 142 | 1938 | 96.90 | 2233 | 159 | 159 | 2551 | 127.55 | 5777 | 453 | 906 | 7136 | 356.80 |
| Scoring | .25 | 1890 | 152 | 152 | 2194 | 548.50 | 1654 | 142 | 142 | 1938 | 484.50 | 2233 | 159 | 159 | 2551 | 637.75 | 5777 | 453 | 906 | 7136 | 1624.10 |
| Preprinted computer paper | 1.00 | | 152 | 20 | 172 | 172.00 | | 142 | 16 | 158 | 158.00 | | 159 | 17 | 176 | 176.00 | | 453 | 53 | 506 | 506.00 |
| Computer time (app. .1mm) | $.15/mm | | 152 | 20 | 172 | 2580.00 | | 142 | 16 | 158 | 2370.00 | | 159 | 17 | 176 | 2640.00 | | 453 | 53 | 506 | 7590.00 |
| Paper feedback notebook | 3.00 | | 152 | 20 | 172 | 516.00 | | 142 | 16 | 158 | 474.00 | | 159 | 17 | 176 | 528.00 | | 453 | 53 | 506 | 1518.00 |
| I.D. labels teacher/ supervisor | .02 | | 304 | 20 | 324 | 6.48 | | 284 | 16 | 300 | 6.00 | | 318 | 17 | 335 | 6.70 | | 906 | 53 | 959 | 19.18 |
| Packet envelopes 2/student teacher x 2 | .15 each | | 304 | 20 | 324 | 48.60 | | 284 | 16 | 300 | 45.00 | | 318 | 17 | 335 | 50.25 | | | 53 | 959 | 143.85 |
| I.D. labels teacher/ supervisor | .02 | | 152 | 20 | 172 | 3.44 | | 142 | 16 | 158 | 3.16 | | 159 | 17 | 176 | 3.52 | | 453 | 53 | 506 | 10.12 |
| Packet envelopes teacher/ supervisor | .15 each | | 152 | 20 | 172 | 25.80 | | 142 | 16 | 158 | 23.70 | | 159 | 17 | 176 | 26.40 | | 453 | 53 | 506 | 75.90 |
| Total | | | | | | 4063.12 x 23.62 | | | | | 3708.66 x 23.47 | | | | | 4248.97 x 24.14 | | | | | 12,049.75 |

# Part V
# FINDINGS: EVALUATION OF INSTRUCTION INSTRUMENT

## INTRODUCTION

The purpose of this section of the report is to present and discuss the findings as they relate to a 37 item Evaluation of Instruction Instrument which was completed as a part of the staff development project by secondary and post-secondary instructors, supervisors, and pupils in three cooperating states: Kentucky, Virginia, and Wisconsin. Each teacher, supervisor and pupil responded to each of the 37 items on the instrument. The purpose of the Evaluation of Instruction Instrument was to assess the classroom behavior of teachers. Each teacher rated their perception of their classroom teaching behavior on one form; supervisor rated the classroom behaviors of each teacher they supervised, using the evaluation of instruction form, and each pupil in a teacher's class also used the instrument to rate the teacher on the teachers observed classroom behaviors. These data are presented in the terms of answers to a set of five criterion questions posed at the outset of this study.

The criterion questions are to determine whether there were differences among the three participating states in terms of: (a) relaibility, (b) content validity, (c) concurrent validity, (d) utility validity, and (e) costs as they relate to the responses of secondary and post-secondary teachers, supervisors,and pupils on an Evaluation of Instruction Instrument.

## RELIABILITY

### Criterion Question #1

Are there differences among the three participating states in terms of the reliability of responses provided by secondary and post-secondary vocational teachers, supervisors, and pupils on an Evaluation of Instruction Instrument as estimated by Cronbach's alpha test of internal consistency?

Tables 20 and 21 present the coefficients of internal consistency for a 37 item Evaluation of Instruction Instrument for secondary and post-secondary instructors respectively for the three participating states.

The data for the combined states show that internal consistency coefficients for secondary school personnel were r = .814 for students, r = .886 for teachers and r = .964 for supervisors. There appeared to be

Table 20

Internal Consistency Coefficients of the Evaluation of Instruction Instrument for Secondary Students, Teachers, and Supervisors (Cronbach's Alpha)

| | Kentucky | Virginia | Wisconsin | All states |
|---|---|---|---|---|
| Students | .858 (49 classes) | .746 (55 classes) | .865 (31 classes) | .814 (135 classes) |
| Teachers | .842 (N=50) | .880 (N=66) | .870 (N=32) | .886 (N=148) |
| Supervisors | .943 (N=52) | .976 (N=68) | .956 (N=33) | .964 (N=153) |

PE 3, SE4, TE5

Table 21

Internal Consistency Coefficients of the Evaluation of Instruction Instrument for Post-Secondary Students, Teachers, and Supervisors (Cronbach's Alpha)

| | Kentucky | Virginia | Wisconsin | All states |
|---|---|---|---|---|
| Students | .883 (94 classes) | .875 (72 classes | .874 (119 classes) | .878 (283 classes) |
| Teachers | .833 (N=100) | .897 (N=77) | .893 (N=128) | .877 (N=305) |
| Supervisors | .940 (N=105) | .947 (N=60) | .954 (N=143) | .950 (N=308) |

PE3, SE4, TE5

no differences among the three states in terms of the reliability of pupil, teacher, and supervisor responses. All coefficients were .80 or greater. This suggests that the Evaluation of Instruction Instrument seems equally reliable for secondary vocational pupils, teachers, and supervisors in each of the three states.

The coefficients of internal consistency for post-secondary pupils, teachers, and supervisors in the three states are shown in Table 21. When data are viewed across all states, the coefficients of reliability are r = .878 for students, r = .877 for teachers, and r = .950 for supervisors. There appear to be no differences in reliability of responses across the three states for either students, teachers, or supervisors responses. The data range from only a low of r = .833, to a high of r = .954. All the coefficients were well within the range of acceptability (r = .75 - 1.00). Thus, it is reasonable to place confidence in subsequent data comparisons.

The conclusion that seems obvious is that there are no differences among the three participating states in terms of the coefficients of internal consistency reliability for either secondary or post-secondary teachers, supervisors, or pupils.

## CONTENT VALIDITY

### Criterion Question #2

Are there differences among the three states in terms of the content validity of the Evaluation of Instruction Instrument in terms of the rating of secondary and post-secondary teachers, supervisors and pupils?

Students, teachers, and supervisors were asked to rate each of the 37 items of the instrument and indicate if the statement (item) was a classroom behavior that a teacher should perform in their job. The greater the proportion of personnel who responded "yes," the greater the content validity of the item for a teacher's job. The results indicate the relative content validity of the instrument items for assessing the classroom behavior of a teacher. Content validity of the specific items for each of the three states are shown in Appendix A.

Table 22 shows the number of items that at least 80 percent of secondary and post-secondary teachers, supervisors, and pupils rated as relevant to the teacher's job for each of the three states and for the combined states.

Table 23

Number and Percent of Items Perceived as Relevant
by at Least Eighty Percent of Participants
on the 37 Item Evaluation
Instruction Instrument
(Secondary and Postsecondary)

| | KY | | | VA | | | WI | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | P | T | S | P | T | S | P | T | S | P | T | S |
| Sec | 65% | 83% | 81% | 68% | 81% | 89% | 62% | 81% | 81% | 64% | 84% | 81% |
| (N) | 24 | 31 | 30 | 25 | 30 | 33 | 23 | 30 | 30 | 24 | 31 | 31 |
| | (1099) | (50) | (52) | (778) | (62) | (68) | (544) | (32) | (33) | (2421) | (143) | (153) |
| Psec | 78% | 83 | 83 | 76% | 81% | 83% | 81% | 83% | 83% | 81% | 83% | 83% |
| (N) | 29 | 31 | 31 | 28 | 30 | 31 | 30 | 31 | 31 | 30 | 31 | 31 |
| | (78) | (100) | (103) | (898) | (77) | (60) | (1689) | (128) | (143) | (3356) | (305) | (308) |

P = Pupils
T = Teachers
S = Supervisors

The data show that 24 of 37 items (64%) were rated as relevant by 80% of the secondary students and 31 of 37 items (89%) were rated as relevant by secondary teachers with 30 of 37 items (81%) rated as relevant by secondary supervisors.

Similarly, 30 of 37 items (81%) were rated as relevant by post-secondary pupils; 31 of 37 items (83%) were rated as relevant by postsecondary teachers and supervisors respectively.

The data were very similar for secondary and post-secondary pupils, teachers, and supervisors in the three participating states. In general, postsecondary teachers and supervisors rated the 37 items as about 81% to 83% relevant to the role of the teacher in each of the three participating states. However, secondary and post-secondary pupils rated the items as being less relevant than either teachers or supervisors. In general, pupils rated the items consistently less relevant (65%-78%) than teachers or supervisors.

The conclusion which seems most warranted is that 80% of the secondary and post-secondary teachers and supervisors in the three participating states tended to agree that about 80% to 83% of the items were relevant to the role of the teacher, but secondary and post-secondary pupils tended to rate the

items as being less relevant (65%-75%) to the role of the teacher. Thus, there appears to be no large differences among the three states in terms of the content validity of the items for secondary and post-secondary teachers and supervisors. Additional analyses would have to be conducted in order to determine the reason for the consistently lower ratings by students.

## CONCURRENT VALIDITY

### Criterion Question #3

Are there differences among the three participating states in terms of the amount of agreement among ratings of secondary and post-secondary pupils, teachers and supervisors of the items on the Evaluation of Instruction Instrument?

Comparable ratings from one class of students for each teacher, teacher ratings and supervisor rating of each teacher were obtained for secondary and post-secondary pupils, teachers, and supervisors in each of the three states on a 37 item Evaluation of Instruction Instrument. Pearson product moment correlations were computed among the ratings of secondary and post-secondary pupils, teachers, and supervisors for each of the three states based on instrument totals.

Table 23 shows the correlation coefficient for pupil/teacher ratings, pupil/supervisor ratings and teacher/supervisor ratings within each of the three states and across the three states for secondary and post-secondary personnel respectively.

The data for the secondary school personnel for the combined three states show a statistically significant correlation between pupil/teacher rating ($r = .2226$) and between teacher/supervisor ratings ($r = .2953$). In these instances, statistical significance means that the correlation is statistically significant from zero. However, these correlations are still not very high. A correlation of $r = .29$ accounts for only about 10% of the variance between the two ratings.

There appear to be differences among the three states in terms of the relationship among the ratings of secondary school pupils, teachers, and supervisors. There appears to be a statistically significant relationship between secondary school pupil/supervisor ratings ($r = .3555$) and secondary school teacher/supervisor ratings ($r = .4005$) for personnel in the state of Kentucky. No significant relationship were evident within the state of

Table 23

Pearson Product Correlations Total Scores of Teacher Effectiveness Ratings Among Secondary and Post-Secondary Pupils, Teachers and Supervisors for Kentucky, Virginia, Wisconsin and Combined States

| | Secondary | | | | | | | | Post-Secondary | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Kentucky | | Virginia | | Wisconsin | | Combined States | | Kentucky | | Virginia | | Wisconsin | | Combined States | |
| | N | r | N | r | N | r | N | r | N | r | N | r | N | r | N | r |
| Pupil/Teacher | 51 | .2370 | 39 | .1946 | 30 | -.0229 | 123 | .2910* | 102 | .1828 | 55 | .3285* | 106 | .2114* | 263 | .2226* |
| Pupil/Supervisor | 50 | .3555* | 58 | .0990 | 32 | .1807 | 120 | .1826 | 100 | .2858* | 75 | .2718* | 125 | .2443* | 300 | .2639* |
| Teacher/Supervisor | 48 | .4005* | 45 | .1041 | 30 | .3675* | 123 | .2953* | 100 | .1849 | 55 | .3686* | 106 | .1402 | 261 | .2064* |

Virginia, and only the ratings of secondary school teacher/supervisors was significant in Wisconsin. Also, there was a negative correlation between pupils/teachers ratings in Wisconsin.

In conclusion, states tended to differ with respect to the amount of agreement in ratings of the effectiveness of teachers in the classroom as reflected by the ratings of pupils, teachers, and supervisors. Teachers/supervisors tended to agree more consistently than either pupil/teacher ratings or pupil/supervisor ratings. Only in the State of Wisconsin was a negative correlation observed between pupil/teacher ratings. The Evaluation of Instruction Instrument appears to have differential concurrent validity by states, but does have a certain degree of concurrent validity for pupil/teacher ratings and teacher/supervisor ratings when data are combined for the three states.

For the combined data for post-secondary school personnel, all correlations were statistically significant. That is, the correlation for pupil/teachers was statistically significant ($r = .2226$) from zero, as well as pupil/supervisor ratings ($r = .2639$) and teacher/supervisor ratings ($r = .2064$).

Each of the three sets of ratings were statistically significant for pupils, teachers, and supervisors in the state of Virginia, and two sets were statistically significant in Wisconsin (pupil/teacher $r = .2114$) and (pupil/supervisor $r = .2443$). Only one set of correlations was statistically significant for pupils/supervisors in Kentucky ($r = .22858$).

The Evaluation of Instruction Instrument appears to possess a higher degree of concurrent validity for postsecondary pupils, teachers, and supervisors than for secondary school personnel. Also, there appears to be a greater degree of agreement of post-secondary pupils, teachers, and supervisors within each of the three states than existed for secondary school personnel. It seems safe to conclude that states do differ with respect to the concurrent validity of the Evaluation of Instruction Instrument by level of education. It appears also to be more valid for post-secondary personnel than secondary school pupils, teachers, or supervisors.

# UTILITY VALIDITY

## Criterion Question #4

Are there differences among the three participating states in terms of the ratings of secondary and post-secondary teachers and supervisors as to the usefulness/utility and accuracy of the computerized feedback of the Evaluation of Instruction Instrument for planning a program of professional improvement?

Each teacher and supervisor was asked to respond to four questions concerning the accuracy of pupil, teacher, and supervisor rating and the usefulness of a computerized feedback of these ratings as a means for developing a personalized plan of professional improvement. Table 24 shows the ratings of the secondary vocational instructors to the four questions in each of the three participating states and for the combined three states. Table 25 shows similar ratings for the post-secondary school teachers and supervisors for each of the participating states and the combined states.

## Teacher Ratings

For the most part, secondary teachers in the three states believe the rating to be: (a) an accurate assessment of their teaching (88%), (b) believed computer feedback would help in developing a plan of professional improvement (72%), (c) believe student ratings would be helpful in improving teaching practices (92%), and (d) believed supervisors ratings would also be helpful in improving a teacher's classroom practices (79%).

The differences among the three states in terms of the responses of secondary teachers to the four questions were slightly different, but differences were not large. About 87% - 90% of the teachers believed the Evaluation of Instruction Instrument to be an accurate assessment of their teaching, (b) 66% - 79% believed the computer feedback would be of value in developing a plan of professional improvement, (c) 87% - 97% believed student ratings to be very helpful in improving teaching practices, and (d) 75% - 85% believed supervisors ratings would be helpful in improving teaching practices.

## Supervisor Ratings

The data concerning utility validity for secondary vocational

Table 24

Usefulness of the Evaluation of Instruction Instruments for Planning Professional Development of Teachers as Perceived by Secondary Teachers

| KEY: % (N) | KY | | VA | | WI | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | YES | NO | YES | NO | YES | NO | YES | NO |
| Accurate description of your teaching? | 87.5 (42) | 12.5 (6) | 87.5 (56) | 12.5 (8) | 90.6 (29) | 9.4 (3) | 88.2 (127) | 11.8 (17) |
| Would self-ratings help in improving your teaching? | 79.2 (38) | 20.8 (10) | 70.3 (45) | 29.7 (19) | 65.6 (21) | 34.4 (11) | 72.2 (104) | 27.8 (40) |
| Would student ratings help in improving your teaching? | 95.8 (46) | 4.2 (2) | 87.1 (54) | 12.9 (8) | 96.9 (31) | 3.1 (1) | 92.3 (131) | 7.7 (11) |
| Would supervisor's ratings help in improving your teaching? | 85.4 (41) | 14.6 (7) | 75.4 (46) | 24.6 (15) | 77.4 (24) | 22.6 (7) | 79.3 (111) | 20.7 (29) |

TE5, #1-4 (Please refer to items 1-4 at end of Teacher Form for exact wording of items.)

Table 25

Usefulness of the Evaluation of Instruction Instruments for Planning Professional Development of Teachers as Perceived by Secondary Supervisors

| KEY: % (N) | KY | | VA | | WI | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | YES | NO | YES | NO | YES | NO | YES | NO |
| Accurate description of instructor's teaching? | 98.1 (51) | 1.9 (1) | 95.5 (64) | 4.5 (3) | 93.9 (31) | 6.1 (2) | 96.1 (146) | 3.9 (6) |
| Would teacher's self-ratings help in improving teaching? | 75.0 (39) | 25.0 (13) | 89.6 (60) | 10.4 (7) | 97.0 (32) | 3.0 (1) | 86.2 (131) | 13.8 (21) |
| Would student ratings help in improving teaching? | 98.1 (51) | 1.9 (1) | 79.1 (53) | 20.9 (14) | 97.0 (32) | 3.0 (1) | 89.5 (136) | 10.5 (16) |
| Would supervisor's ratings help in improving teacher? | 75.0 (39) | 25.0 (13) | 70.1 (47) | 29.9 (20) | 90.9 (30) | 9.1 (3) | 76.3 (116) | 23.7 (36) |

SE4, #1-4 (Please refer to items 1-4 at end of Supervisor Form for exact wording of items.)

supervisors is shown in Table 25. Based on the combined data for the three states, supervisors believe the data to be (a) accurate (96.1%), (b) useful for improving teaching (86.2%), (c) student ratings of teachers would help improve teaching practice (89.5%) and (d) supervisor ratings would help improve teaching practice (76.3%).

The data for supervisors were quite similar across all three states. Supervisors in the three states tended to agree that: (a) the data were 98% - 94% accurate, (b) teacher self-ratings would improve teaching (97% - 75%), (c) student rating of teachers would help improve teaching (79% - 98%) and supervisor ratings would help improve teaching (70% - 91%). Secondary school supervisors in Virginia did not believe either student rating (79%) or supervisor ratings (70%) would be as much value to teachers as supervisors in the other two states.

Tables 26 and 27 provide similar information about utility validity or usefulness of the computerized feedback for post-secondary vocational teachers and supervisors respectively in the three participating states.

The post-secondary teachers in the three states believed the Evaluation of Instruction Instrument and computerized feedback to be: (a) a relatively accurate description of teaching behavior (84.3%), (b) helpful in developing a plan of professional development (74.7%), (c) student ratings would be helpful in improving teaching practices (88.7%), and (d) supervisor ratings would be helpful in improving teaching practices (76.8%).

When comparing the data provided by the post-secondary teachers within the three states, there appear to be relatively few differences: (a) 80% - 91% of the teachers believe the data to be accurate, (b) 70% - 80% believe the computer feedback would be helpful in improving teaching, (c) 80 - 96% believe student ratings important to improving teaching, and (d) 72% - 81% believe supervisor ratings would also be helpful for improving teaching practices, Thus, it can be concluded that the Evaluation of Instruction Instrument and the usefulness of the computerized feedback would be helpful for improving teaching practices and possesses a relatively high degree of utility validity for a majority of the postsecondary teachers in the three participating states.

Table 27 shows the utility validity (usefulness) rating of post-secondary vocational supervisors. When viewing the combined responses of the supervisors in the three participating states: (a) the data are

Table 27

Usefulness of the Evaluation of Instruction Instruments for Planning Professional Development of Teachers as Perceived by Post-Secondary Teachers

| KEY: % (N) | KY YES | KY NO | VA YES | VA NO | WI YES | WI NO | TOTAL YES | TOTAL NO |
|---|---|---|---|---|---|---|---|---|
| Accurate description of your teaching? | 80.4 (78) | 19.6 (19) | 78.7 (59) | 21.3 (16) | 90.9 (110) | 9.1 (11) | 84.3 (247) | 15.7 (46) |
| Would self-ratings help in improving your teaching? | 70.1 (68) | 29.9 (29) | 72.0 (54) | 28.0 (21) | 80.0 (96) | 20.0 (24) | 74.7 (218) | 25.3 (74) |
| Would student ratings help in improving your teaching? | 80.4 (78) | 19.6 (19) | 88.0 (66) | 12.0 (9) | 95.8 (115) | 4.2 (5) | 88.7 (259) | 11.3 (33) |
| Would supervisor's ratings help in improving your teaching? | 72.2 (70) | 27.8 (27) | 81.3 (61) | 18.7 (14) | 77.8 (91) | 22.2 (26) | 76.8 (222) | 23.2 (67) |

TE5, #1-4 (Please refer to items 1-4 at end of Teacher Form for exact wording of items.)

Table 28

Usefulness of the Evaluation of Instruction Instruments for Planning Professional Development of Teachers as Perceived by Post-Secondary Supervisors

| KEY: % (N) | KY YES | KY NO | VA YES | VA NO | WI YES | WI NO | TOTAL YES | TOTAL NO |
|---|---|---|---|---|---|---|---|---|
| Accurate description of instructor's teaching? | 88.3 (91) | 11.7 (12) | 77.6 (45) | 22.4 (13) | 99.3 (134) | .7 (1) | 91.2 (270) | 8.8 (26) |
| Would teacher's self-ratings help in improving teaching? | 93.2 (96) | 6.8 (7) | 94.9 (56) | 5.1 (3) | 74.8 (101) | 25.2 (34) | 85.2 (253) | 14.8 (44) |
| Would student ratings help in improving teaching? | 96.1 (99) | 3.9 (4) | 100.0 (59) | 0.0 (0) | 92.6 (125) | 7.4 (10) | 95.3 (283) | 4.7 (14) |
| Would supervisor's ratings help in improving teaching? | 88.3 (91) | 11.7 (12) | 94.8 (55) | 5.2 (3) | 93.3 (126) | 6.7 (9) | 91.9 (272) | 8.1 (24) |

SE4, #1-4 (Please refer to items 1-4 at end of Supervisor Form for exact wording of items.)

perceived as relatively accurate (92%), (b) would be helpful for improving teaching practices (85%), (c) student ratings of teachers' classroom performance is very important (95.3%), and (d) supervisor rating of teachers would be helpful in improving teaching practices (92%)

There appear to be no large differences among the three states in terms of the supervisor ratings of the utility validity of the data: (a) 78% - 99.3% believe the ratings to be accurate, (b) 75% - 95% believe self-ratings would help improve teaching practices, (c) 93% - 100% believe student ratings would be useful in improving teaching practices, and (d) 88% - 95% believe supervisor ratings would assist teachers to also improve teaching practices.

Based on the data provided by secondary and post-secondary teachers and supervisors in the three states, the evaluation of instruction computerized feedback appears to have a relatively high degree of utility validity as judged by teachers and supervisors in the three states. A majority of the teachers and supervisors in each of the states judged the information to be accurate, and useful for planning a program of professional development. Therefore, there are no large differences among the participating states in terms of the utility validity of the data provided by a computerized feedback of information for the Evaluation of Instruction Instrument.

## RELATIVE COSTS

### Criterion Question #5

Are their differences among the three participating states in terms of the relative costs for implementing an Evaluation of Instruction Instrument for secondary and post-secondary pupils, teachers, and supervisors.

The 37 item Evaluation of Instruction Instrument was administered to all secondary and post-secondary pupils, teachers and supervisors of each teacher. Each student in one class taught by a teacher completed one instrument assessing the classroom behaviors of the teacher. Each teacher completed one instrument and each supervisor completed one instrument for each teacher supervised.

Prepackaged forms were provided to pupils, teachers and supervisors according to their name and unique code number printed on a label on each packet. Data were then collected, analyzed, and provided to each teacher, supervisor, and school by way of a feedback notebook.

The costs relative to administering the Evaluation of Instruction Instrument in the three participating states are provided by item costs for each state as well as total and average costs for each of the three states and the total and average costs for all three states combined.

The costs for administering the Evaluation of Instruction Instrument are the same as for the needs assessment instrument since, in this project, both instruments were administered at the same time. Thus, the major difference in using only one of the instruments would be in the number of instruments used, scored and analyzed. Amount of computer time may be less if only one set of instruments were used. In this study, since both instruments were analyzed at the same time, computer time cannot be separated for the two instruments.

Table 28 shows the cost data for the three participating states and the combined data for all three states for implementing the Evaluation of Instruction Instrument. A combined total of 7,136 evaluation of instruction instruments plus 506 background information forms were used in this study. The number of people participating was 5,777 pupils, 453 teachers and 53 supervisors who completed one form for each of 453 teachers. The total cost of the project was $12,049.75 or an average of $23.81 per teacher and supervisor.

While there are differences among the three participating states in terms of total and average costs, these differences are relatively small and can be explained in terms of differing numbers of pupils, teachers and supervisors who participated in the project. The average cost for administering the instruments to pupils, teachers and supervisors, as well as scoring, analyzing the data and providing a computerized feedback notebook of the data to individual teachers, supervisors and the school was on the average $23-$24 per teacher/supervisor.

The general conclusion is that the cost per teacher for implementing a procedure is relatively inexpensive in terms of the amount and accuracy of the information as a means of facilitating staff development for teachers, vocational departments and vocational schools.

Table 28

**Comparative Costs of Secondary and Post-Secondary Vocational Pupils, Teachers and Supervisors**

on the Evaluation of Instruction Instrument for Three Participating States

| | | Kentucky | | | | | Virginia | | | | | Wisconsin | | | | | Combined group materials | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | P | T | S | Total N | Total cost | P | T | S | Total N | Total cost | P | T | S | Total N | Total cost | P | T | S | Total N | Total cost |
| Background form 1/teacher/ supervisor | .05 | | 152 | 20 | 172 | 8.60 | | 142 | 16 | 158 | 7.90 | | 159 | 17 | 176 | 8.80 | | 453 | 53 | 506 | 25.30 |
| Scoring 1/teacher/ supervisor | .25 | | 152 | 20 | 172 | 43.00 | | 142 | 16 | 158 | 39.50 | | 159 | 17 | 176 | 44.00 | | 453 | 53 | 506 | 126.50 |
| Evaluation instrument 1/teacher/pupil | .05 | 1890 | 152 | 152 | 2194 | 109.70 | 1654 | 142 | 142 | 1938 | 96.90 | 2233 | 159 | 159 | 2551 | 127.55 | 5777 | 453 | 906 | 7136 | 356.80 |
| Scoring | .25 | 1890 | 152 | 152 | 2194 | 548.50 | 1654 | 142 | 142 | 1938 | 484.50 | 2233 | 159 | 159 | 2551 | 637.75 | 5777 | 453 | 906 | 7136 | 1624.10 |
| Preprinted computer paper | 1.00 | | 152 | 20 | 172 | 172.00 | | 142 | 16 | 158 | 158.00 | | 159 | 17 | 176 | 176.00 | | 453 | 53 | 506 | 506.00 |
| Computer time (app. .1mm) | $.15/mm | | 152 | 20 | 172 | 2580.00 | | 142 | 16 | 158 | 2370.00 | | 159 | 17 | 176 | 2640.00 | | 453 | 53 | 506 | 7590.00 |
| Paper feedback notebook | 3.00 | | 152 | 20 | 172 | 516.00 | | 142 | 16 | 158 | 474.00 | | 159 | 17 | 176 | 528.00 | | 453 | 53 | 506 | 1518.00 |
| I.D. labels teacher/ supervisor | .02 | | 304 | 20 | 324 | 6.48 | | 284 | 16 | 300 | 6.00 | | 318 | 17 | 335 | 6.70 | | 906 | 53 | 959 | 19.18 |
| Packet envelopes 2/student teacher x 2 | .15 each | | 304 | 20 | 324 | 48.60 | | 284 | 16 | 300 | 45.00 | | 318 | 17 | 335 | 50.25 | | | 53 | 959 | 143.85 |
| I.D. labels teacher/ supervisor | .02 | | 152 | 20 | 172 | 3.44 | | 142 | 16 | 158 | 3.16 | | 159 | 17 | 176 | 3.52 | | 453 | 53 | 506 | 10.12 |
| Packet envelopes teacher/ supervisor | .15 each | | 152 | 20 | 172 | 25.80 | | 142 | 16 | 158 | 23.70 | | 159 | 17 | 176 | 26.40 | | 453 | 53 | 506 | 75.90 |
| Total | | | | | | 4063.12<br>$\bar{x}$ 23.62 | | | | | 3708.66<br>$\bar{x}$ 23.47 | | | | | 4248.97<br>$\bar{x}$ 24.14 | | | | | 12,049.75 |

# Part VI
# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## SUMMARY

### Purpose

The purpose of this report was to test the external validity and reliability of a set of Professional Needs Assessment and Evaluation of Instructions Instruments for in-service secondary and postsecondary vocational instructors for the three states of Kentucky, Virginia, and Wisconsin. These states were purposefully selected because of the different structure of vocational education within these states. Kentucky offered vocational education in the secondary schools and recently has emphasized vocational education in post-secondary schools. Virginia offered vocational education in secondary schools and in community colleges. Wisconsin historically has offered vocational education in secondary schools and specialized post-secondary vocational institutes.

### Rationale

The rationale for the staff development procedure tested in this project was that in order to continuously improve the quality of vocational instruction, it is necessary to provide teachers with both valid and reliable information relative to the teaching performance as perceived by their students, by themselves and by their immediate supervisors. In addition, this information needs to be aggregated and communicated to individual teachers, supervisors and school systems in such a way that the information can be used to (a) more effectively develop a plan of professional development and (b) to more effectively communicate differences in perceptions of pupils, teachers, and students. It also seems plausible that teaching practices and job responsibility could be improved for in-service vocational instructors by assessing the relevance of tasks to job responsibilities of teachers.

The specific objective of the project was to assess the validity and reliability of a Professional Needs Assessment Instrument and an Evaluation of Instruction instrument as they related to secondary and post-secondary pupils, teachers, and supervisors in the three participating

states. Specific criterion questions concerning the differences among the three states for secondary and post-secondary personnel were posed separately for each of the two instruments. The specific criterion questions pertained to (a) the reliability, (b) content validity, (c) concurrent validity, (d) utility validity, and (e) relative costs of both the professional needs assessment instrument and the Evaluation of Instruction Instrument.

## Design

The design of the study requested that each teacher and supervisor complete: (a) a background information form, (b) 110 item professional needs assessment form for each teacher and for each teacher supervised and (c) a 37 item Evaluation of Instruction form. In this way, a teacher was assessed first by themselves, then by students and finally by their immediate supervisor on two separate instruments. These data were subsequently analyzed, and aggregated into a computerized feedback report for each individual teacher, supervisor and for the total school.

## Instrumentation

The 110 items Needs Assessment Instrument was designed to: (a) identify the pedogogical teaching tasks. The instrument was based on many of the competencies listed in the 100 CBE modules developed by the National Center for Vocational Education, at the Ohio State University.

The Evaluation of Instruction Instrument was developed as a result of two pilot test efforts in Minnesota and a review of literature concerning teacher effectiveness. The purpose of this instrument was to assess the perceived appropriateness/effectiveness of the classroom behavior of each vocational instructor.

## Population Sample

The sample consisted of all secondary and post-secondary teachers, supervisors and one class of students in eight secondary and ten post-secondary vocational schools in the states of Kentucky, Virginia, and Wisconsin. A total of 5,777 students participated in the study of which 2,425 were secondary students and 3,352 were post-secondary students. Also a total of 145 secondary teachers and 308 post-secondary teachers

participated in the study together with 21 secondary and 19 post-secondary supervisors respectively. The distribution of male and female teachers was approximately the same for each of the three states; about 60% were male and 40% were female teachers respectively for the most part, and represents the fields of (a) T&I, (b) technical, (c) office occupations, (d) health occupations, and (e) home economics. The remaining fields accounted for a very small proportion of the sample.

The distribution of age, number of years of teaching, worker experience and amount of education were quite similar for the teachers in the three states. Secondary vocational instructors tended to be younger, and had less technical work experience than postsecondary teachers.

## Findings and Conclusions

The findings are presented separately for the Professional Needs Assessment Instrument and Evaluation of Instruction Instrument as they relate to each of the five criterion questions concerning: (a) reliability, (b) content validity, (c) concurrent validity, (d) utility validity, and relative costs. In both instances, the general criterion question was asked: Are there differences among the three states in terms of the reliability, validity, and costs of the project in terms of secondary and post-secondary vocational pupils, teachers, and supervisors.

## NEEDS ASSESSMENT FINDINGS/CONCLUSIONS

The first set of findings/conclusions are based first on the criterion question that relate to the Professional Needs Assessment Instrument. The five criterion questions relate to the concepts of: (a) reliability, (b) content validity, (c) concurrent validity, (d) utility validity, and (e) relative cost.

### Reliability

There were no differences among the three states in terms of Internal consistency reliability for secondary and post-secondary pupils, teachers, or supervisors on either the 110 item teacher/supervisor needs assessment form or the 40 item student needs assessment form. All of the reliability coefficients for teachers, supervisor by each of the 11 scales of the instrument were .85 or above. The

reliability for the total score on the student instrument was also .85 or above for both secondary and post-secondary students in the three states.

**Content Validity** There were differences among the three states in terms of the percent of items rated by pupils, teachers, and supervisors, as being relevant to the role of the teacher. About 80% - 85% of the task statements were judged by 60% or more of teachers and supervisors as relevant for teachers. It was obvious that some states emphasized certain competencies more than others. Also, there appeared to be differences in content validity ratings between secondary and post-secondary personnel. Post-secondary pupils, teachers, and supervisors judged a greater proportion of the items as relevant than did the secondary school vocational personnel.

**Concurrent Validity** The needs assessment instrument had relatively little concurrent validity in terms of the relationship among pupil, teacher and supervisor ratings for either secondary or post-secondary personnel in the three states. Coefficients of agreement were generally low for secondary and post-secondary personnel within each state. However, there seemed to be a greater degree of agreement for post-secondary pupils, teachers, and supervisors than for their secondary counterparts. It was obvious that teachers have quite different perceptions of their teaching role and needs than either pupils or their supervisors.

**Utility Validity** There were no major differences in the judgments of secondary or post-secondary pupils, teachers, or supervisors as to the accuracy or usefulness of the data for improving teaching practices or developing a plan for professional growth. 80% - 100% of teachers and supervisors in the three states agreed the data provided to teachers were

accurate and useful, but that student ratings of teachers were of greatest comparative value to the teacher.

**Relative Costs** There were no differences among the three states in terms of the average cost for implementing the needs assessment instrument for secondary and post-secondary personnel which could not be accounted for by the different number of pupils, teachers or supervisors who participated in the study in each state. The average cost per teacher/supervisor in each state ranged from $23-$24. Data were not analyzed separately for secondary and post-secondary personnel due to the relatively small numbers of teachers and supervisors within a state at the secondary school level.

## FINDINGS/CONCLUSIONS: EVALUATION OF INSTRUCTION

The findings and conclusions related to the Evaluation of Instruction Instrument are presented in terms of the original criterion questions concerning the differences among the vocational personnel in the three participating states in terms of: (a) reliability, (b) concurrent validity, (c) concurrent validity, (d) utility validity, and (e) relative costs.

**Reliability** There were no differences among the three states in terms of the internal consistency reliability coefficients for secondary and post-secondary pupils, teachers, or supervisors on the Evaluation of Instruction Instrument. Coefficients for students, teachers, and supervisors at the secondary and postsecondary level were all r = .85 or higher. This is well within the range of acceptance.

**Content Validity** There were differences among the states in terms of the proportion of items judged to be related to the classroom behavior of teachers, however, these differences were more evident for secondary pupils, teachers, and supervisors than post-secondary personnel. A larger proportion of the post-secondary pupils, teachers and supervisors judge the

items to be more relevant than their secondary school counterparts. This may suggest that there may be differences between the perceived expected teaching behaviors of personnel as judged by the Evaluation of Instruction Instrument. It may also suggest that separate instruments need to be developed for the two levels of vocational education.

**Concurrent Validity**

There were no differences among the three states in terms of the extent of agreement among the ratings of secondary and post-secondary pupils, teachers, and students on the Evaluation of Instruction Instrument. That is, relatively few of correlated ratings were found to be statistically significant from zero. This implies that secondary and post-secondary pupils, teachers, and supervisors have quite different perceptions of the appropriate classroom behavior of teachers. While the differences are not great, the Evaluation of Instruction Instrument seems to provide greater amounts of agreement for post-secondary pupils, teachers, and supervisors than for secondary school personnel.

**Utility Validity**

There were only slight differences among the three states in terms of the utility validity of the Evaluation of Instruction data as perceived by secondary and post-secondary teachers and supervisors. Teachers and supervisors agreed that (a) 80% - 90% of the data were accurate, (b) the data would be helpful to teachers, and (c) student evaluations of the teachers was of slightly more value to a teacher than supervisor rating of a teacher. The instrument seems to possess utility validity for a majority of the secondary and post-secondary teachers and supervisors.

**Relative Costs**

There were no differences among the three states in terms of the average cost for implementing the Evaluation of

Instruction Instrument for secondary and post-secondary personnel which could not be accounted for by the different numbers of pupils, teachers, or supervisors who participated in the study in each state. The average cost per teacher/supervisor in each state ranged from $23-$24. Data were not analyzed specially for secondary and post-secondary personnel due to the relatively small numbers of teachers and supervisors within a state at the secondary and school level.

## RECOMMENDATIONS AND DISCUSSIONS

The purpose of this study was to test the external validity of a staff development procedure for use with a set of Professional Needs Assessment Instruments and a set of Evaluation of Instruction Instruments which were responded to by self-evaluations of teachers and similar assessments by their students and immediate supervisors in selected secondary and post-secondary vocational schools in three participating states.

The data reported in this study was limited to the responses provided by the participants in this study and thus only provides descriptive information concerning the psychometric characteristics of the instruments and their potential use in other school settings.

In this sense, establishing the reliability and validity of these instruments is not a one time study, but rather an ongoing process. The recommendations are therefore presented first in terms of the psychometric characteristics of the two sets of instruments and secondly in terms of the general considerations for continued use of the instruments, the feedback reports and their subsequent uses.

1. Both instruments have high internal consistency reliability, but there is a need to determine the test-retest stability for all forms of the instruments and for various student, and teacher populations.
2. Not all of the items appear to have content validity for teachers or supervisors at the secondary and post-secondary levels. Instrument/item revisions may be necessary.
3. Other procedures or instruments need to be used to assess the predictive, concurrent, and construct validity of the

instruments. Experimental longitudinal studies that relate external measures of teaching success to teacher characteristics or onto teacher education credits may be required.

4. The face and utility validity of the accuracy and usefulness of the feedback data needs also to be further and more critically explored.
5. The general cost/effectiveness of the procedure needs to be further explored. In other words, is the accuracy and amount of data provided by the procedure worth the cost of implementation. This also would necessarily require a longitudinal staff development procedure using various methods of formative and summarative evaluations.
6. Additional work needs to be done in order to determine if both the Professional Needs Assessment Instruments and the Evaluation of Instruction instruments need to be used for a program of staff development or could either one or the other substitute for each other.

## Implementing Staff Development

As a result of planning for and conducting the staff development project in the three states, considerable knowledge and insight was gained in terms of identifying several specific "dos" and "don'ts" for implementing a program of staff development. The purpose of this part of the recommendations is to provide a list of recommended procedural cautions before implementing any program of staff development.

## Procedural Cautions for Staff Development Programs

1. Secure the approval of the chief school official.
2. Insure that the local Board of Education is supportive of a program of staff development.
3. Insure that sufficient human and financial resources are available to conduct and maintain a program of staff development.
4. Establish an advisory team composed of lead instructors, supervisors, and some students representing various program areas.
5. Obtain and critique available information models or instruments

which may exist concerning procedures for implementing a program of staff development.

6. Members of the staff advisory committee should select the best staff development procedure, model or material from what exists and which best meets the immediate and long range staff development needs of the teachers and the total school system.
7. Inform the teaching staff and other concerned individuals about the purpose, procedures and potential benefit of the staff development program.
8. Assure the teachers that all information will be confidential and in no way will it affect their employment, salary, job assignment, but rather will be used only for their self-improvement and continued professional growth.
9. Develop and/or secure the necessary software and hardware necessary to implement the program of staff development.
10. Pilot test the staff development procedure with a few select programs using the materials/procedures selected as most appropriate.
11. Modify the materials or procedures as necessary based on the results of the pilot test effort.
12. Implement and maintain a continuous program of staff development according to some pre-specified, systematic plan.

## SUMMARY

The purpose of the recommendations are to: (a) suggest additional work which needs to be done in order to further validate the two instruments and feedback procedure used in this study and (b) to suggest a list of procedural steps on cautions which need to be considered by school officials and concerned personnel before implementing a program of staff development for in-service vocational teachers. The concept of staff development for in-service teachers will continue to be of extreme importance in the future as the concern for quality of vocational instruction increases, but it can also be a very threatening experience for participating teachers if it is not presented and implemented with integrity, confidentiality, and professionalism.

# AVAILABILITY OF STAFF DEVELOPMENT MATERIALS

This proposed system of Staff Development for In-service Vocational Teachers was developed with the idea that it was a comprehensive system, complete with instruments and computerized feedback procedures. However, since federal funding has been terminated, the availability of the instruments, scoring services and computerized feedback procedures are limited.

Copies of all the instruments are available in the Minnesota Research and Development Center for Vocational Education, University of Minnesota. They may be purchased for the unit cost figures shown in this report.

Forms can be purchased, scored, the data analyzed in aggregate form using the SPSS computer programs available in most universities. In many instances and for some users, it may not be necessary to provide feedback to individual teachers or schools, but rather, deal with aggregate data across teachers, supervisors or other pertinent populations.

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# APPENDICES

## Appendix A:
## PROFESSIONAL NEEDS ASSESSMENT INSTRUMENTS

1. Background Information

2. Professional Needs Assessment Teacher Form

3. Professional Needs Assessment—Supervisor Form

4. Professional Needs Assessment--Student Form

# STAFF DEVELOPMENT FOR VOCATIONAL EDUCATION PERSONNEL
## BACKGROUND INFORMATION

Minnesota Research and Development Center for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

RDC

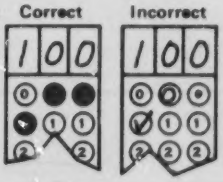
## INTRODUCTION

**Your responses to the questions on this questionnaire will be useful in identifying current and future staff development needs. Your individual responses will be kept in strict confidence and will not be shared with anyone. All responses to these questions will be reported in aggregate form only.**

### MARKING DIRECTIONS

- Use only a black lead pencil (No. 2½ or less)
- Make heavy black marks that fill the circles
- Erase cleanly any answers you wish to change
- Make no stray marks on this sheet

Sample: Correct Incorrect



| Mode | School | Teacher | Supervisor | Level | Program Code |
|---|---|---|---|---|---|
| ○○○ | ○○○ | ○○○ | ○○○ | Secondary ○ | SEE BELOW FOR PROGRAM CODE ○○○○ |
| 111 | 111 | 111 | 111 | Post Secondary ○ | 1111 |
| 222 | 222 | 222 | 222 | Both ○ | 2222 |
| 333 | 333 | 333 | 333 | Sex | 3333 |
| 444 | 444 | 444 | 444 | Male ○ | 4444 |
| 555 | 555 | 555 | 555 | Female ○ | 5555 |
| 666 | 666 | 666 | 666 | | 6666 |
| 777 | 777 | 777 | 777 | | 7777 |
| 888 | 888 | 888 | 888 | | 8888 |
| 999 | 999 | 999 | 999 | | 9999 |

## PROGRAM CODES

**DIRECTIONS:** *Do not read the entire list of program codes.*

1. **Think of the name of the program you teach.**
2. **Locate your program within one of the major areas below.**
3. **If you do not find your program, select the next most likely major area and attempt to identify your program.**
4. **If you still do not find your program, mark "other" for the major area in which you feel your program best belongs.**

**OTHER**
8010 Related Instruction
8020 Special Needs
8090 Other

**AGRICULTURE**
1010 Agricultural Production
1020 Agricultural Supplies/Services
1030 Agricultural Mechanics
1040 Agricultural Products
1050 Ornamental Horticulture
1060 Agricultural Resources
1070 Forestry
1990 Other

**DISTRIBUTION**
2010 Advertising Services
2020 Apparel and Accessories
2030 Automotive
2040 Finance and Credit
2050 Floristry
2060 Food Distribution
2070 Food Services
2080 General Merchandise
2090 Hardware, Building Materials
2100 Home Furnishings
2110 Hotel and Lodging
2120 Industrial Marketing
2130 Insurance
2140 International Trade
2150 Personal Services
2160 Petroleum
2170 Real Estate
2180 Recreation and Tourism
2190 Transportation
2200 Retail Trade, Other
2310 Wholesale Trade, Other
2990 Other

**HEALTH**
3101 Dental Assistant
3102 Dental Hygienist (Associate Degree)
3103 Dental Laboratory Technology
3199 Other Dental
3203 Medical Laboratory Assisting
3299 Other Medical Laboratory Technology
3301 Nursing (Associate Degree)
3302 Practical (Vocational) Nursing
3303 Nursing Assistant (Aide)
3305 Surgical Technology
3399 Other Nursing
3401 Occupational Therapy
3402 Physical Therapy
3499 Other Rehabilitation
3501 Radiologic Technology
3503 Nuclear Medical Technology
3599 Other Radiologic
3600 Ophthalmic
3700 Environmental Health
3800 Mental Health Technology
3903 Inhalation Therapy Technology (Respiratory)
3904 Medical Assistant
3906 Health Aide
3907 Medical Emergency Technician
3909 Mortuary Science
3990 Other

**CONSUMER AND HOMEMAKING**
4101 Comprehensive Homemaking
4102 Child Development
4103 Clothing and Textiles
4104 Consumer Education
4106 Family Relations
4107 Food and Nutrition
4108 Home Management
4109 Housing and Home Furnishings
4199 Other

**OCCUPATIONAL HOME ECONOMICS**
4201 Care and Guidance of Children
4202 Clothing Mgmt., Production and Services
4203 Food Management, Production and Services
4204 Home Furnishing, Equipment and Services
4205 Institutional & Home Management & Services
4299 Other

**OFFICE**
5100 Accounting and Computing Occupations
5201 Computer and Console Operators
5203 Programmers
5299 Other Business Data Processing
5300 Filing, Office Machines, Clerical Occupations
5400 Information Communication Occupations
5500 Materials Support, Transportation, etc.
5600 Personnel Training and Related Occupations
5700 Steno., Secretarial and Related Occupations
5800 Supervisory and Admin. Mgmt. Occupations
5900 Typing and Related Occupations
5990 Other

**TECHNICAL**
6101 Aeronautical Technology
6103 Architectual Technology
6104 Automotive Technology
6105 Chemical Technology
6106 Civil Technology
6107 Electrical Technology
6108 Electronic Technology
6109 Electromechanical Technology
6110 Environmental Control Technology
6111 Industrial Technology
6112 Instrumental Technology
6113 Mechanical Technology
6114 Metallurgical Technology
6117 Scientific Data Technology
6601 Commercial Pilot Training
6602 Fire and Fire Safety Technology
6603 Forestry Technology
6604 Oceanographic Technology
6605 Police Science
6991 Air Pollution Technology
6992 Water and Waste Water Technology
6999 Other

**TRADES AND INDUSTRY**
7100 Air Conditioning
7110 Appliance Repair
7120 Body and Fender Repair
7130 Auto Mechanics
7199 Other Automotive
7200 Aviation Occupations
7210 Blueprint Reading
7220 Business Machine Maintenance
7230 Commercial Art Occupations
7240 Commercial Fishery Occupations
7250 Commercial Photography Occupations
7260 Carpentry
7270 Electricity
7280 Masonry
7290 Plumbing and Pipefitting
7299 Other Construction and Maintenance Trades
7300 Custodial Service
7310 Diesel Mechanic
7320 Drafting Occupations
7330 Electrical Occupations
7340 Electronic Occupations
7350 Fabric Maintenance Services
7360 Foremanship Supervisor & Mgmt. Development
7370 Graphic Arts Occupations
7380 Industrial Atomic Energy Occupations
7390 Instrument Maint. and Repair Occupations
7391 Maritime Occupations
7392 Machine Shop
7393 Machine Tool Occupations
7394 Sheet Metal
7395 Welding and Cutting
7396 Tool and Die Making
7399 Other Metalworking Occupations
7400 Metallurgy Occupations
7410 Barbering
7420 Cosmetology
7499 Other Personal Services
7500 Plastics Occupations
7510 Firefighter Training
7520 Law Enforcement Training
7599 Other Public Services
7600 Quantity Food Occupations
7610 Refrigeration
7620 Small Engine Repair
7630 Stationary Energy Sources Occupations
7640 Textile Production and Fabrication
7650 Leather Working
7660 Upholstering
7670 Woodworking Occupations
7680 Truck Driving
7699 Other

Continue on back.

DIRECTIONS: Please blacken the circle beside the answer you want to give.

1. What is your present position?
   - ○ Classroom Instructor
   - ○ Department Head/Supervisor
   - ○ Counselor
   - ○ Co-op Coordinator
   - ○ Administrator
   - ○ Other (Please specify)_____

2. What age category are you in?
   - ○ Under 25
   - ○ 26-30
   - ○ 31-35
   - ○ 36-40
   - ○ 41-45
   - ○ 46-50
   - ○ 51-55
   - ○ 56-60
   - ○ Over 60

3. Indicate your total years of vocational education teaching experience.
   - ○ Less than 1 year
   - ○ 1-2 years
   - ○ 3-4 years
   - ○ 5-6 years
   - ○ 7-8 years
   - ○ 9-10 years
   - ○ More than 10 years

4. Indicate the number of years of work experience you have completed which is directly related to the courses you currently are teaching?
   - ○ Does not apply
   - ○ None
   - ○ Less than 1 year
   - ○ 1-2 years
   - ○ 3-4 years
   - ○ 5-6 years
   - ○ 7-8 years
   - ○ 9-10 years
   - ○ 11-12 years
   - ○ 13-14 years
   - ○ 15-16 years
   - ○ 17-18 years
   - ○ 19-20 years
   - ○ More than 20 years

5. Indicate the number of months of work experience you have completed during the past five years.
   - ○ None
   - ○ Less than 1 month
   - ○ 1-4 months
   - ○ 5-8 months
   - ○ 9-12 months
   - ○ 13-16 months
   - ○ 17-20 months
   - ○ 21-24 months
   - ○ 25-28 months
   - ○ 29-32 months
   - ○ 33-36 months
   - ○ 37-48 months
   - ○ More than 48 months

6. Indicate highest degree or diploma earned.
   - ○ None
   - ○ High School/G.E.D.
   - ○ Technical Diploma
   - ○ Associate's Degree
   - ○ Bachelor's Degree
   - ○ Master's Degree
   - ○ Doctor's Degree

7. Are you currently working on a degree?
   - ○ Yes
   - ○ No

8. How many professional teacher education courses have you completed for which you received college or university credit? (Examples: Methods of Teaching; Philosophy of Vocational Education; Curriculum Construction)
   *Do not include technical courses!*
   - ○ None
   - ○ 1-3 courses
   - ○ 4-6 courses
   - ○ 7-9 courses
   - ○ 10-15 courses
   - ○ 16-20 courses
   - ○ 21-25 courses
   - ○ More than 25 courses

9. How many professional teacher education courses have you completed during the past two years for which you received college or university credit?
   - ○ None
   - ○ 1 course
   - ○ 2 courses
   - ○ 3 or 4 courses
   - ○ 5 or 6 courses
   - ○ 7 or 8 courses
   - ○ 9 or 10 courses
   - ○ More than 10 courses

10. Are teachers in your school encouraged to participate in activities that will help them become better teachers?
    - ○ Yes
    - ○ No

11. Are teachers in your school provided useful assistance in developing a personalized plan for professional self-development?
    - ○ Yes
    - ○ No

12. Do you feel that the present in-service staff development efforts in your school are adequate?
    - ○ Yes
    - ○ No

13. Do you feel that systematic efforts in in-service staff development are important?
    - ○ Yes
    - ○ No

14. How much money should be spent on in-service staff development per teacher per year?
    - ○ Less than $50
    - ○ $50 - $100
    - ○ $101 - $300
    - ○ $301 - $500
    - ○ $501 - $700
    - ○ $701 - $900
    - ○ $901 - $1000
    - ○ More than $1000

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# STAFF DEVELOPMENT PROFESSIONAL NEEDS ASSESSMENT

for Vocational Teachers

Minnesota Research and Development Center
for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

**TEACHER FORM**

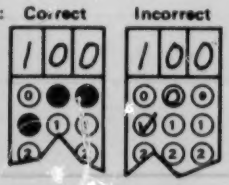
## INTRODUCTION

This questionnaire, which contains a comprehensive list of professional teaching competencies, is provided for you to identify your specific professional needs as they relate to your present teaching responsibilities. *Your individual responses will be kept in strict confidence and will be reported back only to you.*

**MARKING DIRECTIONS**

- Use only a black lead pencil (No. 2½ or less)
- Make heavy black marks that fill the circles
- Erase cleanly any answers you wish to change
- Make no stray marks on this sheet

Sample: Correct Incorrect



Code | School | Teacher | Supervisor

Level: Secondary ○ Post Secondary ○ Both ○

Sex: Male ○ Female ○

Program Code — REFER TO PROGRAM CODE SHEET

**DIRECTIONS:** *Please read directions carefully.*

1. Read each item and indicate to the left of the item whether it is a competency that is or is not relevant to your present position. Blacken (Y) for Yes or blacken (N) for No.
2. If you indicated "No" to an item, do not rate your need to improve for that item. Continue to the next statement.
3. Only if you indicated "Yes" to an item should you then rate your need to improve for that item. A rating of (1) indicates *no improvement* is needed and (7) indicates a *very high need to improve.*

Note: This is not an evaluation of your teaching performance, but rather a self assessment intended to identify areas in which you think there is room for improvement. Please respond as accurately as you can.

| RELEVANCE Yes | RELEVANCE No | PERFORMANCE STATEMENTS | NEED TO IMPROVE None | Low | | Medium | | High | Very High |
|---|---|---|---|---|---|---|---|---|---|
| | | **EXAMPLES:** | | | | | | | |
| (Y) | ● | **A. Use the blackboard.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| ● | (N) | **B. Return tests promptly.** | (1) | (2) | (3) | (4) | (5) | ● | (7) |
| | | I. PROGRAM PLANNING, DEVELOPMENT AND EVALUATION | | | | | | | |
| (Y) | (N) | 1. Plan a community survey to identify local employer demands and student occupational interests. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **2. Collect and interpret employer demand and student occupational interest information.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 3. Apply the findings of a community survey to your vocational program. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **4. Organize or reorganize an occupational advisory committee.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 5. Maintain an occupational advisory committee. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **6. Use an advisory committee to set vocational program goals and objectives.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 7. Develop long-range plans for your vocational program. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **8. Conduct an occupational analysis to identify entry-level occupational competencies for your vocational program.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 9. Conduct a continuous student follow-up study of former students. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **10. Evaluate your vocational program.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |



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| RELEVANCE Yes | RELEVANCE No | PERFORMANCE STATEMENTS | NEED TO IMPROVE None | Low | Medium | High | Very High |
|---|---|---|---|---|---|---|---|
| | | II. INSTRUCTIONAL PLANNING | | | | | |
| Y | N | 11. Develop a philosophy for your vocational program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **12. Develop a course of study.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 13. Determine and analyze the instructional needs of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **14. Write student performance objectives.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 15. Plan and write a unit of instruction. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **16. Write a lesson plan.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 17. Obtain appropriate student instructional materials. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **18. Design and prepare teacher-made instructional materials.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | III. INSTRUCTIONAL TECHNIQUES | | | | | |
| Y | N | 19. Organize and introduce a lesson. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **20. Summarize a lesson for students.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 21. Demonstrate a manipulative skill. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **22. Give a lecture.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 23. Direct individual and/or group field trips. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **24. Conduct group discussions, panel discussions and symposiums.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 25. Stimulate learning through brainstorming and buzz groups. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **26. Facilitate student learning through role playing techniques.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 27. Organize and direct student laboratory experiences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **28. Direct students in applying problem-solving techniques.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 29. Direct students in acquiring skills, attitudes, or concepts using the project method. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **30. Employ oral questioning techniques in a planned lesson to guide student's thinking.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 31. Conduct a lesson using reinforcement techniques. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **32. Design a lesson which considers individual differences of students.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 33. Present information using illustrations from your occupational speciality. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **34. Demonstrate a concept or principle from your occupational specialty.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 35. Plan, present and evaluate a lesson as a team teaching member. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **36. Present information using a subject matter expert.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 37. Develop bulletin boards and exhibits. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **38. Present a lesson using models, flannel boards or real objects.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 39. Present information using overhead or opaque projectors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **40. Present information using films, filmstrips and slides.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 41. Present information with televised and videotaped materials. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **42. Present information using records and tapes.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 43. Present information with chalkboard and flip chart. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | IV. PERSONALIZED INSTRUCTION | | | | | |
| Y | N | **44. Organize and direct students to help instruct other students.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 45. Direct independent and group study of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **46. Direct individualized or personalized instruction.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 47. Adjust instructional activities or methods to meet the needs and abilities of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **48. Use instructional contracts for individualized or personalized instruction.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 49. Direct programmed instruction. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **50. Review instructional activities and materials to identify and eliminate bias in terms of sex, race, religion, etc.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 51. Identify students who need special assistance to succeed in your vocational program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **52. Refer handicapped and disadvantaged students for diagnostic and/or special services.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 53. Identify chemical dependent students (e.g., excessive alcohol and drug users). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **54. Refer chemical dependent students to appropriate agencies or services for professional assistance.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| RELEVANCE Yes | RELEVANCE No | PERFORMANCE STATEMENTS | NEED TO IMPROVE None | Low | | Medium | | High | Very High |
|---|---|---|---|---|---|---|---|---|---|
| | | **V. INSTRUCTIONAL EVALUATION** | | | | | | | |
| Y | N | 55. Establish standards for student performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 56. Develop a paper and pencil test to assess student knowledge of the subject. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 57. Develop a test or similar device to assess student attitudes toward the subject area. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 58. Develop a test or system to assess the technical skill level of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 59. Determine student grades or performance levels in the program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 60. Evaluate your own instructional effectiveness. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | **VI. INSTRUCTIONAL MANAGEMENT** | | | | | | | |
| Y | N | 61. Identify and plan future instructional resource needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 62. Prepare financial budgets and reports for your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 63. Purchase or arrange for purchasing supplies and equipment. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 64. Maintain a filing system. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 65. Develop a safety program based on local, state, and federal safety regulations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 66. Explain accident and safety procedures. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 67. Develop a system for administering preventive and corrective classroom discipline. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 68. Organize a vocational laboratory. | | | | | | | |
| | | 69. Manage and maintain a vocational laboratory. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | **VII. GUIDANCE** | | | | | | | |
| Y | N | 70. Clarify your own personal and social values. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 71. Accept students with different or unique personal social values. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 72. Identify and interpret student personal or cumulative information. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 73. Gather student data through personal contacts. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 74. Assist students to identify personal, educational, and career needs through teacher-student conferences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 75. Provide information on educational and career opportunities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 76. Teach job and education seeking skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | **VIII. SCHOOL-COMMUNITY RELATIONS** | | | | | | | |
| Y | N | 77. Develop a plan to improve and maintain school-community relations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 78. Make presentations to school and community groups to promote your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 79. Design and provide brochures to inform the school and community about your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 80. Design and provide displays in the school and community on your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 81. Prepare news releases and articles to promote your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 82. Plan and present television and radio programs to promote your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 83. Plan and conduct an open house for your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 84. Provide services to members of the community (e.g., adult evening classes). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 85. Cooperate with state and local educators. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 86. Obtain feedback from the school and community concerning your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | **IX. STUDENT VOCATIONAL ORGANIZATIONS** | | | | | | | |
| Y | N | 87. Develop a personal philosophy toward student vocational organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 88. Establish a student vocational organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 89. Assist students in preparing for leadership roles in student vocational organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 90. Assist students in developing and financing a yearly program of activities for their vocational organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 91. Supervise activities of student vocational organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 92. Provide learning experiences for students through vocational organization competitive events. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| RELEVANCE Yes | RELEVANCE No | PERFORMANCE STATEMENTS | NEED TO IMPROVE None | Low | Medium | High | Very High |
|---|---|---|---|---|---|---|---|
| | | X. PROFESSIONAL ROLE AND DEVELOPMENT | | | | | |
| Y | N | 93. Keep up-to-date in your profession and occupational specialty. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 94. Develop and maintain active involvement in professional teaching organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 95. Develop and maintain a professional philosophy of education/ teaching. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 96. Develop and maintain active involvement in school and community affairs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 97. Obtain and maintain a teaching position in keeping with your professional qualifications. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 98. Plan and provide laboratory experiences for student teachers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 99. Plan the student teaching experience. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 100. Supervise student teachers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | XI. COORDINATION | | | | | |
| Y | N | 101. Establish standards and procedures for operating a cooperative vocational education program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 102. Establish and apply policies for managing student attendance, transfers and terminations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 103. Recruit and enroll prospective students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 104. Identify and secure prospective training stations for co-op students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 105. Place co-op students in appropriate training stations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 106. Develop the training ability of on-the-job supervisors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 107. Coordinate and supervise on-the-job instruction. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 108. Evaluate on-the-job student performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 109. Plan and conduct related instruction. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 110. Plan and conduct an employer-employee appreciation event or banquet. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

USEFULNESS OF QUESTIONNAIRE

1. In terms of your professional development, do you think this questionnaire represents an accurate assessment of your strengths and concerns?

   ○ Yes ○ No

2. Would a tabulation of your needs from this questionnaire help you better plan your professional development?

   ○ Yes ○ No

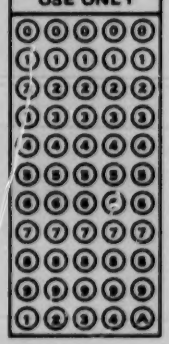
3. Would a tabulation of your needs as perceived by your students help you better plan your professional development?

   ○ Yes ○ No

4. Would a tabulation of your needs as perceived by your immediate supervisor help you better plan your professional development?

   ○ Yes ○ No

FOR INTRAN USE ONLY





Intran-1346G-SE713-54321

# STAFF DEVELOPMENT
# PROFESSIONAL NEEDS ASSESSMENT
## for Vocational Teachers

Minnesota Research and Development Center
for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

SUPERVISOR FORM

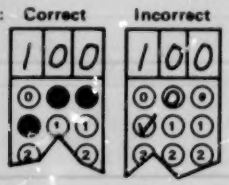
### INTRODUCTION

This questionnaire, which contains a comprehensive list of professional teaching competencies, is provided for you to identify the specific professional needs of the vocational instructors under your supervision. *Your individual responses will be kept in strict confidence and will be reported back only to you.*

**MARKING DIRECTIONS**

- Use only a black lead pencil (no. 2½ or less)
- Make heavy black marks that fill the circles
- Erase cleanly any answers you wish to change
- Make no stray marks on this sheet

Sample: Correct Incorrect



Code | School | Teacher | Supervisor | Level (Secondary, Post Secondary, Both) | Sex (Male, Female) | Program Code (REFER TO PROGRAM CODE SHEET)

**DIRECTIONS:** *Please read directions carefully.*

1. Read each item and indicate to the left of the item whether it is a competency that is or is not relevant for the specific instructor you are assessing. Blacken (Y) for Yes or blacken (N) for No.
2. If you indicated "No" to an item, do not mark the instructor's need to improve for that item. Continue to the next statement.
3. Only if you indicated "Yes" to an item should you then rate the instructor's need to improve for that item. A rating of (1) indicates *no improvement* is needed and (7) indicates a *very high need to improve.*

Note: This is not an evaluation of the teacher, but rather an assessment intended to identify areas in which you think this teacher may need improvement. Please respond as accurately as you can.

| RELEVANCE Yes | RELEVANCE No | PERFORMANCE STATEMENTS | NEED TO IMPROVE None | Low | | Medium | | High | Very High |
|---|---|---|---|---|---|---|---|---|---|
| | | **EXAMPLES:** | | | | | | | |
| (Y) | | **A. Use the blackboard.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | (N) | **B. Return tests promptly.** | 1 | 2 | 3 | 4 | 5 | | 7 |
| | | **I. PROGRAM PLANNING, DEVELOPMENT AND EVALUATION** | | | | | | | |
| (Y) | (N) | 1. Plan a community survey to identify local employer demands and student occupational interests. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | **2. Collect and interpret employer demand and student occupational interest information.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | 3. Apply the findings of a community survey to your vocational program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | **4. Organize or reorganize an occupational advisory committee.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | 5. Maintain an occupational advisory committee. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | **6. Use an advisory committee to set vocational program goals and objectives.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | 7. Develop long-range plans for your vocational program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | **8. Conduct an occupational analysis to identify entry-level occupational competencies for your vocational program.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | 9. Conduct a continuous student follow-up study of former students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (Y) | (N) | **10. Evaluate your vocational program.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |



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| RELEVANCE | | PERFORMANCE STATEMENTS | NEED TO IMPROVE | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Yes | No | | None | Low | | Medium | | High | Very High |
| | | **II. INSTRUCTIONAL PLANNING** | | | | | | | |
| (Y) | (N) | 11. Develop a philosophy for your vocational program. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **12. Develop a course of study.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 13. Determine and analyze the instructional needs of students. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **14. Write student performance objectives.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 15. Plan and write a unit of instruction. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **16. Write a lesson plan.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 17. Obtain appropriate student instructional materials. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **18. Design and prepare teacher-made instructional materials.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | **III. INSTRUCTIONAL TECHNIQUES** | | | | | | | |
| (Y) | (N) | 19. Organize and introduce a lesson. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **20. Summarize a lesson for students.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 21. Demonstrate a manipulative skill. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **22. Give a lecture.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 23. Direct individual and/or group field trips. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **24. Conduct group discussions, panel discussions and symposiums.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 25. Stimulate learning through brainstorming and buzz groups. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **26. Facilitate student learning through role playing techniques.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 27. Organize and direct student laboratory experiences. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **28. Direct students in applying problem-solving techniques.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 29. Direct students in acquiring skills, attitudes, or concepts using the project method. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **30. Employ oral questioning techniques in a planned lesson to guide student's thinking.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 31. Conduct a lesson using reinforcement techniques. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **32. Design a lesson which considers individual differences of students.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 33. Present information using illustrations from your occupational speciality. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **34. Demonstrate a concept or principle from your occupational specialty.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 35. Plan, present and evaluate a lesson as a team teaching member. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **36. Present information using a subject matter expert.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 37. Develop bulletin boards and exhibits. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **38. Present a lesson using models, flannel boards or real objects.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 39. Present information using overhead or opaque projectors. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **40. Present information using films, filmstrips and slides.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 41. Present information with televised and videotaped materials. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **42. Present information using records and tapes.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 43. Present information with chalkboard and flip chart. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | **IV. PERSONALIZED INSTRUCTION** | | | | | | | |
| (Y) | (N) | **44. Organize and direct students to help instruct other students.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 45. Direct independent and group study of students. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **46. Direct individualized or personalized instruction.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 47. Adjust instructional activities or methods to meet the needs and abilities of students. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **48. Use instructional contracts for individualized or personalized instruction.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 49. Direct programmed instruction. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **50. Review instructional activities and materials to identify and eliminate bias in terms of sex, race, religion, etc.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 51. Identify students who need special assistance to succeed in your vocational program. | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **52. Refer handicapped and disadvantaged students for diagnostic and/or special services.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | 53. Identify chemical dependent students (e.g., excessive alcohol and drug users). | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (Y) | (N) | **54. Refer chemical dependent students to appropriate agencies or services for professional assistance.** | (1) | (2) | (3) | (4) | (5) | (6) | (7) |

# STAFF DEVELOPMENT
# PROFESSIONAL NEEDS ASSESSMENT
for vocational teachers

STUDENT FORM

Minnesota Research and Development Center
for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

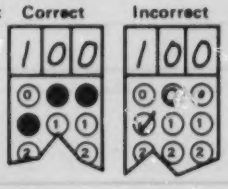
## INTRODUCTION

The purpose of this questionnaire is for you to identify areas where your instructor needs to improve his/her teaching skills. Your individual responses will not be shown to your teacher. However, the combined responses of all students in your class will be given to the instructor to help improve his/her teaching.

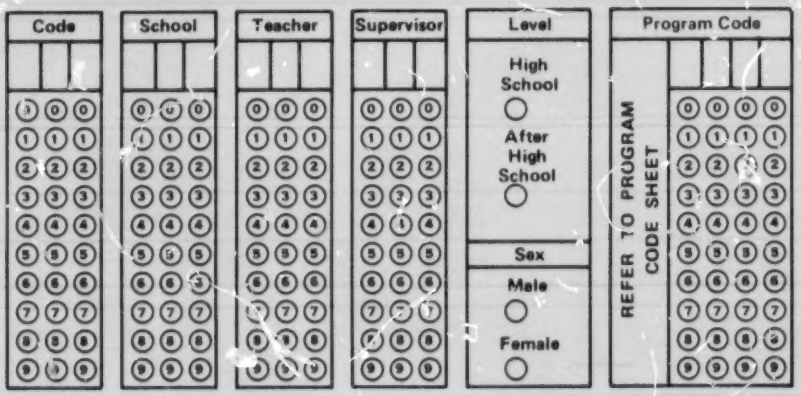
**MARKING DIRECTIONS**

- Use only a black lead pencil (No. 2½ or less)
- Make heavy black marks that fill the circles
- Erase cleanly any answers you wish to change
- Make no stray marks on this sheet

Sample: Correct Incorrect



Code | School | Teacher | Supervisor | Level (High School / After High School) | Sex (Male / Female) | Program Code (REFER TO PROGRAM CODE SHEET)



DIRECTIONS: *Please read the directions carefully.*

1. Read each item and decide if the statement does or does not apply to your teacher. Blacken the circle to the left of the item only if it does not apply to your teacher.

2. If you indicated "does not apply" to an item, do not rate the teacher's need to improve for that item. Continue to the next statement.

3. Only if you feel the item does apply should you then rate the teacher's need to improve for that item. A rating of ① means *no improvement* is needed and ⑦ means a *very high need to improve*.

Note: This is not an evaluation of the teacher, but rather an assessment intended to identify areas in which you think this teacher may need improvement. Please respond as accurately as you can.

| Does Not Apply | PERFORMANCE STATEMENTS | NEED TO IMPROVE None | Low | | Medium | | High | Very High |
|---|---|---|---|---|---|---|---|---|
| | THE INSTRUCTOR NEEDS TO IMPROVE IN: | | | | | | | |
| | **EXAMPLES:** | | | | | | | |
| ● | **A. Using the blackboard.** | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| Ⓝ | **B. Returning tests promptly.** | ① | ② | ③ | ④ | ⑤ | ⑥ | ● |
| Ⓝ | 1. Explaining about job demand and student interest in those jobs. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| Ⓝ | **2. Following-up his/her former students.** | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| Ⓝ | 3. Evaluating his/her vocational program. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| Ⓝ | **4. Stating the plans for the course.** | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| Ⓝ | 5. Presenting an organized lesson. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |

Continue on back.



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| Does Not Apply | PERFORMANCE STATEMENTS | NEED TO IMPROVE | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | None | Low | | Medium | | High | Very High |
| | THE INSTRUCTOR NEEDS TO IMPROVE IN: | | | | | | | |
| N | 6. Preparing teacher-made learning materials. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 7. Introducing a lesson on a new topic. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 8. Showing students how to perform a job related skill. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 9. Giving a lecture. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 10. Organizing and directing field trips. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 11. Directing laboratory or shop activities of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 12. Complimenting students for doing good work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 13. Selecting good guest speakers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 14. Presenting information using the overhead projector. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 15. Presenting information using the chalkboard. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 16. Directing individualized instruction. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 17. Adjusting learning activities to meet the needs of individual students | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 18. Identifying students who need extra help in order to learn. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 19. Referring students who have alcohol or drug problems for professional help. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 20. Making good paper and pencil tests. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 21. Testing the skill level of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 22. Determining student grades fairly. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 23. Organizing and maintaining a filing system for equipment and supplies. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 24. Explaining accident and safety procedures. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 25. Disciplining students when needed. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 26. Accepting students who are "different". | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 27. Helping students identify personal, educational and career goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 28. Providing information on educational and career opportunities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 29. Teaching students how to locate and apply for a job. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 30. Helping students find full or part-time jobs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 31. Making presentations to school and community groups to promote his/her program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 32. Conducting an open house for his/her program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 33. Cooperating with other teachers and school officials. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 34. Helping students prepare for roles in student vocational organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 35. Supervising the activities of student vocational organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 36. Keeping up-to-date in his/her teaching profession and occupational specialty (subject area). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 37. Maintaining a good attitude about teaching. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 38. Involving him/herself in school and community activities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 39. Evaluating on-the-job student performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| N | 40. Providing up-to-date career and occupational information. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

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| RELEVANCE Yes | RELEVANCE No | PERFORMANCE STATEMENTS | NEED TO IMPROVE None | Low | Medium | High | Very High |
|---|---|---|---|---|---|---|---|
| | | V. INSTRUCTIONAL EVALUATION | | | | | |
| Y | N | 55. Establish standards for student performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 56. Develop a paper and pencil test to assess student knowledge of the subject. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 57. Develop a test or similar device to assess student attitudes toward the subject area. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 58. Develop a test or system to assess the technical skill level of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 59. Determine student grades or performance levels in the program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 60. Evaluate your own instructional effectiveness. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | VI. INSTRUCTIONAL MANAGEMENT | | | | | |
| Y | N | 61. Identify and plan future instructional resource needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 62. Prepare financial budgets and reports for your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 63. Purchase or arrange for purchasing supplies and equipment. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 64. Maintain a filing system. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 65. Develop a safety program based on local, state, and federal safety regulations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 66. Explain accident and safety procedures. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 67. Develop a system for administering preventive and corrective classroom discipline. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 68. Organize a vocational laboratory. | | | | | | | |
| Y | N | 69. Manage and maintain a vocational laboratory. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | VII. GUIDANCE | | | | | |
| Y | N | 70. Clarify your own personal and social values. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 71. Accept students with different or unique personal social values. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 72. Identify and interpret student personal or cumulative information. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 73. Gather student data through personal contacts. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 74. Assist students to identify personal, educational, and career needs through teacher-student conferences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 75. Provide information on educational and career opportunities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 76. Teach job and education seeking skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | VIII. SCHOOL-COMMUNITY RELATIONS | | | | | |
| Y | N | 77. Develop a plan to improve and maintain school-community relations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 78. Make presentations to school and community groups to promote your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 79. Design and provide brochures to inform the school and community about your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 80. Design and provide displays in the school and community on your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 81. Prepare news releases and articles to promote your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 82. Plan and present television and radio programs to promote your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 83. Plan and conduct an open house for your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 84. Provide services to members of the community (e.g., adult evening classes). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 85. Cooperate with state and local educators. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 86. Obtain feedback from the school and community concerning your program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | IX. STUDENT VOCATIONAL ORGANIZATIONS | | | | | |
| Y | N | 87. Develop a personal philosophy toward student vocational organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 88. Establish a student vocational organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 89. Assist students in preparing for leadership roles in student vocational organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 90. Assist students in developing and financing a yearly program of activities for their vocational organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 91. Supervise activities of student vocational organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 92. Provide learning experiences for students through vocational organization competitive events. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| RELEVANCE Yes | RELEVANCE No | PERFORMANCE STATEMENTS | NEED TO IMPROVE None | Low | Medium | High | Very High |
|---|---|---|---|---|---|---|---|
| | | X. PROFESSIONAL ROLE AND DEVELOPMENT | | | | | |
| Y | N | 93. Keep up-to-date in your profession and occupational specialty. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **94. Develop and maintain active involvement in professional teaching organizations.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 95. Develop and maintain a professional philosophy of education/ teaching. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **96. Develop and maintain active involvement in school and community affairs.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 97. Obtain and maintain a teaching position in keeping with your professional qualifications. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **98. Plan and provide laboratory experiences for student teachers.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 99. Plan the student teaching experience. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **100. Supervise student teachers.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | XI. COORDINATION | | | | | |
| Y | N | 101. Establish standards and procedures for operating a cooperative vocational education program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **102. Establish and apply policies for managing student attendance, transfers and terminations.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 103. Recruit and enroll prospective students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **104. Identify and secure prospective training stations for co-op students.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 105. Place co-op students in appropriate training stations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **106. Develop the training ability of on-the-job supervisors.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 107. Coordinate and supervise on-the-job instruction. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **108. Evaluate on-the-job student performance.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 109. Plan and conduct related instruction. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **110. Plan and conduct an employer-employee appreciation event or banquet.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

USEFULNESS OF QUESTIONNAIRE

1. In terms of the instructor's professional development, do you think this questionnaire represents an accurate assessment of his/her strengths and concerns?
   ○ Yes ○ No

2. Would a tabulation of the instructor's needs from this questionnaire as perceived by him/herself help the instructor better plan his/her professional development?
   ○ Yes ○ No

3. Would a tabulation of the instructor's needs as perceived by the instructor's students help him/her better plan his/her professional development?
   ○ Yes ○ No

4. Would a tabulation of the instructor's needs as perceived by you help the instructor better plan his/her professional development?
   ○ Yes ○ No

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|---|
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## Appendix B:
## EVALUATION OF INSTRUCTION INSTRUMENTS

1. Teacher Instrument

2. Supervisor Instrument

3. Student Instrument

# STAFF DEVELOPMENT EVALUATION OF INSTRUCTION

for vocational teachers

TEACHER FORM

Minnesota Research and Development Center for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

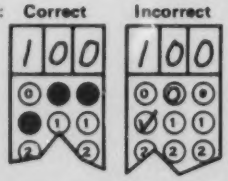
## INTRODUCTION

This questionnaire, which describes instructor teaching behavior, is provided for the purpose of improving instruction in vocational-technical education. *Your individual responses will be kept in strict confidence and will be reported back only to you.*

**MARKING DIRECTIONS**

- Use only a black lead pencil (No. 2½ or less)
- Make heavy black marks that fill the circles
- Erase cleanly any answers you wish to change
- Make no stray marks on this sheet

Sample: Correct Incorrect



| Code | School | Teacher | Supervisor | Level | Program Code |
|---|---|---|---|---|---|
| ○○○ | ○○○ | ○○○ | ○○○ | Secondary ○ | REFER TO PROGRAM CODE SHEET ○○○○ |
| 0 1 2 3 4 5 6 7 8 9 | 0 1 2 3 4 5 6 7 8 9 | 0 1 2 3 4 5 6 7 8 9 | 0 1 2 3 4 5 6 7 8 9 | Post Secondary ○ | 0 1 2 3 4 5 6 7 8 9 |
| | | | | Both ○ | |
| | | | | Sex | |
| | | | | Male ○ | |
| | | | | Female ○ | |

## SECTION I

DIRECTIONS: Please blacken the circle beside the answer you want to give.

1. How long has your supervisor been supervising your instructional activities?
   ○ Not at all ○ 1-6 months ○ 7-12 months ○ 1-2 years ○ More than 2 years

| | Not at all | 1 time | 2-3 times | 4-6 times | 7-9 times | More than 9 times |
|---|---|---|---|---|---|---|
| 2. During the past year, how often has your immediate supervisor visited your classroom or shop while class was in session? | ○ | ○ | ○ | ○ | ○ | ○ |
| 3. During the past year, how often have you had a private conversation with your immediate supervisor to discuss your progress, strengths, and/or concerns? | ○ | ○ | ○ | ○ | ○ | ○ |

| | Poor | Below Average | Average | Above Average | Outstanding |
|---|---|---|---|---|---|
| 4. How would you rate your *overall ability to teach?* | ○ | ○ | ○ | ○ | ○ |
| 5. How would you rate your overall *technical knowledge* of the occupational program you teach? | ○ | ○ | ○ | ○ | ○ |
| 6. How would you rate your overall proficiency in the area of *instructional planning?* | ○ | ○ | ○ | ○ | ○ |
| 7. How would you rate your overall proficiency in the area of *instructional delivery?* | ○ | ○ | ○ | ○ | ○ |
| 8. How would you rate your overall proficiency in the area of *instructional evaluation?* | ○ | ○ | ○ | ○ | ○ |

## SECTION II

DIRECTIONS: *Please read the directions carefully.*

1. You will need to respond twice to each item.
2. First, read each item and decide if the teaching behavior described is *important for overall effective teaching.* Blacken (Y) for *Yes* or blacken (N) for *No* on the *left* side of the item.
3. Second, evaluate yourself by blackening one of the numbers following each item. The number (1) indicates that you *never do this.* The number (7) indicates that you *always do this.*

| Important For Effective Teaching? Yes | No | STATEMENTS RELATING TO INSTRUCTOR BEHAVIOR | YOUR EVALUATION Never | | Seldom | | Sometimes | Often | | Always |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **EXAMPLE:** | | | | | | | | |
| (Y) | ● | A. I grade fairly. | (1) | (2) | ● | | (4) | (5) | (6) | (7) |
| (Y) | (N) | 1. I encourage class discussion. | (1) | (2) | (3) | | (4) | (5) | (6) | (7) |
| (Y) | (N) | 2. I treat students unfairly based on whether they are male or female. | (1) | (2) | (3) | | (4) | (5) | (6) | (7) |

Continue on back.

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| Important For Effective Teaching? Yes | No | STATEMENTS RELATING TO INSTRUCTOR BEHAVIOR | YOUR EVALUATION Never | Seldom | Sometimes | Often | Always |
|---|---|---|---|---|---|---|---|
| Y | N | 3. I discuss vocational student organizations (example: VICA, DECA, OEA) in class. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 4. I know when students do not understand something. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 5. I make sure that course materials are available to students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 6. I give tests which require a student to actually perform a skill. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 7. I praise students for good work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 8. I am willing to give my time to help individual students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 9. I inform students of their progress in the course. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 10. I treat students unfairly based on what race or religion they are. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 11. I am prepared for each day's class session. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 12. I have the facts at my fingertips when explaining something. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 13. I encourage students to talk about their own ideas. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 14. I explain things clearly. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 15. I provide the opportunity for students to practice new skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 16. I use job-related examples when giving explanations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 17. I show students how to perform new skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 18. I ask students to evaluate my teaching. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 19. I use competitive events or skill olympics (as in VICA or DECA or FFA) to evaluate student skill performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 20. I make students feel free to ask questions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 21. I know when students need extra help. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 22. I make sure that all equipment is in working order. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 23. I give assignments that help students learn course content. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| Important For Effective Teaching? Yes | No | DIRECTIONS: Indicate how strongly you agree with the following items: | AGREEMENT Strongly Disagree | | | Agree | | Strongly Agree |
|---|---|---|---|---|---|---|---|---|
| Y | N | 24. I act like I like teaching. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 25. I suggest that students discuss test results with me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 26. I give tests that are directly related to the course content. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 27. I plan instructional activities to meet individual needs of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 28. I am unfriendly to students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 29. I handle course activities in an orderly way. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 30. I encourage students to participate in student organizations (example: VICA, DECA, or FHA). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 31. I am more concerned about having students learn than giving grades. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 32. I have complete knowledge of the subject I teach. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 33. I tell students what they must do or learn in order to successfully complete the course. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 34. I am interested in the occupational field I teach. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 35. I am sincerely concerned about each student. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 36. I have a good background of occupational experience. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 37. I work closely with students who have special needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## USEFULNESS OF QUESTIONNAIRE

| | Yes | No |
|---|---|---|
| 1. Do you think your responses on this questionnaire represent an accurate description of your teaching performance? | O | O |
| 2. Would a tabulation of your responses help you improve your teaching? | O | O |
| 3. Would a tabulation of your students' responses help you improve your teaching? | O | O |
| 4. Would a tabulation of your supervisor's responses help you improve your teaching? | O | O |

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# STAFF DEVELOPMENT EVALUATION OF INSTRUCTION

for vocational teachers

SUPERVISOR FORM

Minnesota Research and Development Center for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

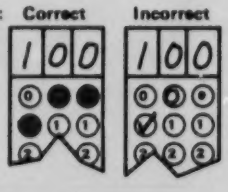
## INTRODUCTION

**This questionnaire, which describes instructor teaching behavior, is provided for the purpose of improving instruction in vocational-technical education.** *Your individual responses will be kept in strict confidence and will be reported back only to you.*

**MARKING DIRECTIONS**

- Use only a black lead pencil (No. 2½ or less)
- Make heavy black marks that fill the circles
- Erase cleanly any answers you wish to change
- Make no stray marks on this sheet

Sample: Correct Incorrect



Code | School | Teacher | Supervisor | Level: Secondary ○ Post Secondary ○ Both ○ | Sex: Male ○ Female ○ | Program Code (REFER TO PROGRAM CODE SHEET)

## SECTION I

DIRECTIONS: Please blacken the circle beside the answer you want to give.

1. How long have you been the supervisor of this instructor's teaching activities?
   ○ Not at all ○ 7-12 months ○ More than 2 years
   ○ 1-6 months ○ 1-2 years

2. During the past year, how often have you visited this instructor's class or laboratory while class was in session? (Not at all ○ 1 time ○ 2-3 times ○ 4-6 times ○ 7-9 times ○ More than 9 times)

3. During the past year, how often have you had a private conversation with this instructor to discuss his/her progress, strengths, and/or concerns. ○○○○○

(Poor ○ Below Average ○ Average ○ Above Average ○ Outstanding)

4. How would you rate this instructor's *overall ability to teach?* ○○○○○
5. How would you rate this instructor's *overall technical knowledge* of the occupational program he/she teaches? ○○○○○
6. How would you rate this instructor's overall proficiency in the area of *instructional planning?* ○○○○○
7. How would you rate this instructor's overall proficiency in the area of *instructional delivery?* ○○○○○
8. How would you rate this instructor's overall proficiency in the area of *instructional evaluation?* ○○○○○

## SECTION II

DIRECTIONS: *Please read the directions carefully.*

1. You will need to respond twice to each item.
2. First, read each item and decide if the teaching behavior described is *important for overall effective teaching.* Blacken (Y) for *Yes* or blacken (N) for *No* on the *left* side of the item.
3. Second, evaluate this teacher by blackening one of the numbers following each item. The number (1) indicates that the instructor *never does this.* The number (7) indicates that the instructor *always does this.*

| Important For Effective Teaching? Yes | No | STATEMENTS RELATING TO INSTRUCTOR BEHAVIOR | YOUR EVALUATION Never | Seldom | Sometimes | Often | Always |
|---|---|---|---|---|---|---|---|
| | | **EXAMPLE:** | | | | | |
| (Y) | ● | **A. The instructor grades fairly.** | (1) | (2) | ● | (4) | (5) (6) (7) |
| (Y) | (N) | 1. The instructor encourages class discussion. | (1) | (2) | (3) | (4) | (5) (6) (7) |
| (Y) | (N) | 2. The instructor treats students unfairly based on whether they are male or female. | (1) | (2) | (3) | (4) | (5) (6) (7) |

Continue on back.

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| Important For Effective Teaching? Yes | No | STATEMENTS RELATING TO INSTRUCTOR BEHAVIOR | YOUR EVALUATION Never | Seldom | Sometimes | Often | Always |
|---|---|---|---|---|---|---|---|
| Y | N | 3. The instructor discusses vocational student organizations (example: VICA, DECA, OEA) in class. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **4. The instructor knows when students do not understand something.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 5. The instructor makes sure that course materials are available to students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **6. The instructor gives tests which require a student to actually perform a skill.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 7. The instructor praises students for good work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **8. The instructor is willing to give his/her time to help individual students.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 9. The instructor informs students of their progress in the course. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **10. The instructor treats students unfairly based on what race or religion they are.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 11. The instructor seems prepared for each day's class session. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **12. The instructor, when explaining something, has the facts at his/her fingertips.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 13. The instructor encourages students to talk about their own ideas. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **14. The instructor explains things clearly.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 15. The instructor provides the opportunity for students to practice new skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **16. The instructor uses job-related examples when giving explanations.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 17. The instructor shows students how to perform new skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **18. The instructor asks students to evaluate his/her teaching.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 19. The instructor uses competitive events or skill olympics (as in VICA or DECA or FFA) to evaluate student skill performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **20. The instructor makes students feel free to ask questions.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 21. The instructor knows when students need extra help. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **22. The instructor makes sure that all equipment is in working order.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 23. The instructor gives assignments that help students learn course content. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Important For Effective Teaching? Yes | No | DIRECTIONS: Indicate how strongly you agree with the following items: | Strongly Disagree | | | Agree | | Strongly Agree |
| Y | N | **24. The instructor appears to like teaching.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 25. The instructor suggests that students discuss test results with him/her. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **26. The instructor gives tests that are directly related to the course content.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 27. The instructor plans instructional activities to meet individual needs of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **28. The instructor is unfriendly to students.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 29. The instructor handles course activities in an orderly way. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **30. The instructor encourages students to participate in student organizations (example: VICA, DECA, or FHA).** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 31. The instructor is more concerned about having students learn than giving grades. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **32. The instructor appears to have complete knowledge of the subject he/she teaches.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 33. The instructor tells students what they must do or learn in order to successfully complete the course. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **34. The instructor appears interested in the occupational field he/she teaches.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 35. The instructor seems to be concerned about each student. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | **36. The instructor appears to have a good background of occupational experience.** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 37. The instructor works closely with students who have special needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

USEFULNESS OF QUESTIONNAIRE

| | Yes | No |
|---|---|---|
| 1. Do you think your responses on this questionnaire represent an accurate description of this instructor's teaching performance? | O | O |
| 2. Would a tabulation of the instructor's own responses on this questionnaire help him/her improve his/her teaching? | O | O |
| 3. Would a tabulation of this instructors students' responses help him/her improve his/her teaching? | O | O |
| 4. Would a tabulation of your responses help this instructor improve his/her teaching? | O | O |

FOR INTRAN USE ONLY



Intran-1346D-SE713-54321

# STAFF DEVELOPMENT EVALUATION OF INSTRUCTION

**STUDENT FORM** — for vocational teachers

Minnesota Research and Development Center for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

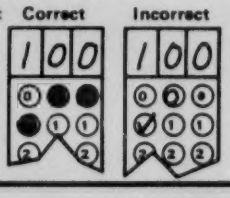
## INTRODUCTION

**The purpose of this questionnaire is for you to help your teacher improve his/her teaching.** *Your individual responses will not be shown to your teacher.* **However, the combined responses of all students in your class will be given to the instructor to help improve his/her teaching.**

**MARKING DIRECTIONS**

- Use only a black lead pencil (No. 2½ or less)
- Make heavy black marks that fill the circles
- Erase cleanly any answers you wish to change
- Make no stray marks on this sheet

Sample: Correct Incorrect



Code | School | Teacher | Supervisor

Level: High School ○ After High School ○

Sex: Male ○ Female ○

Program Code — REFER TO PROGRAM CODE SHEET

## SECTION I

**DIRECTIONS:** Please blacken the circle beside the answer you want to give.

1. What best describes your age?
   - ○ 18 or younger
   - ○ 19-21
   - ○ 22-25
   - ○ 26-29
   - ○ 30 or older

2. How many months have you been in this instructor's class?
   - ○ Less than 1 month
   - ○ 1-2 months
   - ○ 3-4 months
   - ○ 5 months or more

| | Poor | Below Average | Average | Above Average | Outstanding |
|---|---|---|---|---|---|
| 3. Where would you rate your *occupational achievement* in this course in relation to other students in this course? | ○ | ○ | ○ | ○ | ○ |
| 4. How would you rate this instructor's *overall ability to teach?* | ○ | ○ | ○ | ○ | ○ |
| 5. How would you rate this instructor's *overall technical knowledge* of the occupational program he/she teaches? | ○ | ○ | ○ | ○ | ○ |

6. How much do you like this instructor personally?
   - ○ Dislike very much
   - ○ Dislike a little
   - ○ Neither like or dislike
   - ○ Like a little
   - ○ Like very much

7. How much do you like the content of this occupational program?
   - ○ Dislike very much
   - ○ Dislike a little
   - ○ Neither like or dislike
   - ○ Like a little
   - ○ Like very much

| | None | A little | A fair amount | A lot | A tremendous amount |
|---|---|---|---|---|---|
| 8. How much effort have you put into this course? | ○ | ○ | ○ | ○ | ○ |
| 9. How much has this instructor increased your *technical knowledge* of the course content? | ○ | ○ | ○ | ○ | ○ |
| 10. How much has this instructor improved your *skill performance* in this occupational program? | ○ | ○ | ○ | ○ | ○ |

11. Has this instructor changed the *way you feel* about this occupational program?
    - ○ Like a lot less
    - ○ Like a little less
    - ○ No change
    - ○ Like a little more
    - ○ Like a lot more

## SECTION II

**DIRECTIONS:** *Please read the directions carefully.*

1. You will need to respond twice to each item.
2. First, read each item and decide if the teaching behavior described is *important for overall effective teaching.* Blacken (Y) for *Yes* or blacken (N) for *No* on the *left* side of the item.
3. Second, evaluate your teacher by blackening one of the numbers following each item. The number (1) means that your teacher *never does this.* The number (7) means that your teacher *always does this.*

**Continue on back.**

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## SECTION II

| Important For Effective Teaching? Yes | Important For Effective Teaching? No | STATEMENTS RELATING TO INSTRUCTOR BEHAVIOR | YOUR EVALUATION: Never | Seldom | Sometimes | Often | Always |
|---|---|---|---|---|---|---|---|
| | | EXAMPLE | | | | | |
| Y | | A. The instructor grades fairly. | 1 | 2 | ● | 4 | 5 | 6 | 7 |
| Y | N | 1. The instructor encourages class discussion. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 2. The instructor treats students unfairly based on whether they are male or female. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 3. The instructor discusses vocational student organizations (example: VICA, DECA, OEA) in class. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 4. The instructor knows when students do not understand something. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 5. The instructor makes sure that course materials are available to students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 6. The instructor gives tests which require a student to actually perform a skill. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 7. The instructor praises students for good work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 8. The instructor is willing to give his/her time to help individual students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 9. The instructor informs students of their progress in the course. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 10. The instructor treats students unfairly based on what race or religion they are. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 11. The instructor seems prepared for each day's class session. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 12. The instructor, when explaining something, has the facts at his/her fingertips. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 13. The instructor encourages students to talk about their own ideas. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| Y | N | 16. The instructor uses work-related examples when giving explanations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 17. The instructor shows students how to perform new skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 18. The instructor asks students to evaluate his/her teaching. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 19. The instructor uses competitive events or skill olympics (as in VICA or DECA or FFA) to evaluate student skill performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 20. The instructor makes students feel free to ask questions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 21. The instructor knows when students need extra help. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 22. The instructor makes sure that all equipment is in working order. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 23. The instructor gives assignments that help students learn course content. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| Important For Effective Teaching? Yes | Important For Effective Teaching? No | DIRECTIONS: Indicate how strongly you agree with the following items: | AGREEMENT: Strongly Disagree | | | Agree | | Strongly Agree |
|---|---|---|---|---|---|---|---|---|
| Y | N | 24. The instructor appears to like teaching. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 25. The instructor suggests that students discuss test results with him/her. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 26. The instructor gives tests that are directly related to the course content. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 27. The instructor plans instructional activities to meet individual needs of students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 28. The instructor is unfriendly to students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 29. The instructor handles course activities in an orderly way. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 30. The instructor encourages students to participate in student organizations (example: VICA, DECA, or FHA). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 31. The instructor is more concerned about having students learn than giving grades. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 32. The instructor appears to have complete knowledge of the subject he/she teaches. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 33. The instructor tells students what they must do or learn in order to successfully complete the course requirements. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 34. The instructor appears interested in the occupational field he/she teaches. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 35. The instructor seems to be concerned about each student. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 36. The instructor appears to have a broad background of occupational experience. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Y | N | 37. The instructor works closely with students who have special needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |



Intran-1346C-SE713-5432

## Appendix C:
## SAMPLE COMPUTERIZED TEACHER FEEDBACK

1. Professional Needs Assessment Feedback

2. Evaluation of Instruction Feedback

[redacted] DATE 5-78

SUPERVISOR [redacted] TEACHER [redacted] STUDENT N=15 PROGRAM T + I

TEACHER FEEDBACK

# STAFF DEVELOPMENT
# PROFESSIONAL NEEDS ASSESSMENT
## for Vocational Teachers

Minnesota Research and Development Center for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis Minnesota 55455

SCHL AVGS ARE BASED UPON POST SECONDARY RATINGS



REPORT 1

| + = RATED LOW BY RATER(S) - = RATED HIGH BY RATER(S) | ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | | YOUR SCHOOL-S AVERAGES N=32 32 476 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUPERVISOR | TEACHER | STUDENTS | NONE 1 | LOW 2 | 3 | MEDIUM 4 | HIGH 5 | 6 | VERY HIGH 7 | NUMBER RESPONDING | SUPERVISOR | TEACHER | STUDENT |
| 1. Plan a community survey to identify local employer demands and student occupational interests. | - | | 5.0- | | | | | | | | | | 3.9 | 3.3 | |
| 2. Collect and interpret employer demand and student occupational interest information. | - | | 4.0 | 3.6- | 13 | 7 | 20 | 33 | 20 | 7 | | 15 | 3.7 | 3.5 | 2.7 |
| 3. Apply the findings of a community survey to your vocational program. | | | 4.0 | | | | | | | | | | 3.5 | 3.3 | |
| 4. Organize or reorganize an occupational advisory committee. | | | 2.0 | | | | | | | | | | 3.5 | 2.3 | |
| 5. Maintain an occupational advisory committee. | | | 2.0 | | | | | | | | | | 3.4 | 2.1 | |
| 6. Use an advisory committee to set vocational program goals and objectives. | | | | | | | | | | | | | 3.4 | 2.5 | |
| 7. Develop long-range plans for your vocational program. | | | | | | | | | | | | | 4.4 | 4.0 | |
| 8. Conduct a occupational analysis to identify entry-level occupational competencies for your vocational program. | | | | | | | | | | | | | 4.0 | 4.1 | |
| 9. Conduct a continuous student follow-up study of former students. | | | 2.0 | 3.2 | 17 | 17 | 17 | 42 | | 8 | | 12 | 3.5 | 3.2 | 2.6 |
| 10. Evaluate your vocational program. | | | 2.0 | 2.6 | 21 | 29 | 21 | 21 | 7 | | | 14 | 4.3 | 3.1 | 2.6 |
| [redacted] | | | 3.0 | | | | | | | | | | 3.8 | 3.1 | |

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# PROFESSIONAL NEEDS ASSESSMENT

| SUPERVISOR | TEACHER | STUDENT | PROGRAM | DATE ADMIN. | REPORT DATE | PAGE |
|---|---|---|---|---|---|---|
| MI- [redacted] | [redacted] | N=15 | T + I | | | 301 |

TEACHER FEEDBACK

+ = RATED LOW BY RATER(S)
- = RATED HIGH BY RATER(S)

| ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | NUMBER RESPONDING | YOUR SCHOOL-S AVERAGES N=32 32 476 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | NONE | LOW | | MEDIUM | HIGH | | VERY HIGH | | | | |
| | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 11. Develop a philosophy for your vocational program. | | 2.0 | | | | | | | | | | 2.9 | 2.6 | |
| [redacted] | | 3.0 | | | | | | | | | | 2.9 | 2.8 | |
| 13. Determine and analyze the instructional needs of students. | | 3.0 | | | | | | | | | | 3.2 | 3.4 | |
| [redacted] | | 2.0 | 2.5 | 47 | 13 | 13 | 13 | 7 | | 7 | 15 | 3.6 | 3.5 | 2.5 |
| 16. Plan and write a unit of instruction. | | 2.0 | | | | | | | | | | 3.3 | 2.8 | |
| [redacted] + | | 2.0 | 2.1+ | 57 | 14 | 7 | 7 | 14 | | | 14 | 2.5 | 2.1 | 2.6 |
| 17. Obtain appropriate student instructional materials. | | 3.0 | | | | | | | | | | 2.6 | 2.8 | |
| [redacted] | | | 2.5 | 45 | 18 | 9 | | 18 | 9 | | 11 | 2.9 | 3.1 | 2.7 |
| [redacted] | | 2.4 | | | | | | | | | | 3.0 | 2.9 | |
| 19. Organize and introduce a lesson. | | 2.0 | 2.4 | 47 | 13 | | 33 | 7 | | | 15 | 2.4 | 2.5 | 2.7 |
| [redacted] | | 2.0 | | | | | | | | | | 2.3 | 2.9 | |
| 21. Demonstrate a manipulative skill. | | 2.0 | 2.8 | 27 | 20 | 20 | 20 | 7 | 7 | | 15 | 2.3 | 2.5 | 2.7 |
| [redacted] | | 2.0 | 2.5 | 40 | 20 | 7 | 13 | 20 | | | 15 | 2.5 | 3.1 | 2.6 |
| 23. Direct individual and/or group field trips. -- | | 5.0- | 4.4- | | 20 | | 40 | 20 | | 20 | 5 | 4.0 | 3.2 | 3.5 |
| [redacted] | | | | | | | | | | | | 3.2 | 3.3 | |
| 25. Stimulate learning through brainstorming and buzz groups. | | | | | | | | | | | | 3.3 | 3.7 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI- | SUPERVISOR 643 | TEACHER [redacted] | STUDENT N=15 | TEACHER FEEDBACK | PROGRAM T + I | DATE ADMIN. | REPORT DATE |  301

| [redacted] = RATED LOW BY RATER(S) [redacted] = RATED HIGH BY RATER(S) | ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | | YOUR SCHOOL-S AVERAGES N= 32 | 32 | 476 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUPERVISOR | TEACHER | STUDENTS | NONE 1 | LOW 2 | 3 | MEDIUM 4 | HIGH 5 | 6 | VERY HIGH 7 | NUMBER RESPONDING | SUPERVISOR | TEACHER | STUDENT |
| 26. Facilitate student learning through role playing techniques. | | | | | | | | | | | | | 3.1 | 3.7 | |
| [redacted] Organize and direct student laboratory experiences. | | | 2.0 | 2.8 | 15 | 15 | 54 | | 15 | | | 13 | 2.5 | 3.1 | 2.6 |
| 28. Direct students in applying problem-solving techniques. | | | 2.0 | | | | | | | | | | 2.9 | 3.4 | |
| [redacted] Direct students in acquiring skills, attitudes, or concepts using the project method. | | | | | | | | | | | | | 2.7 | 3.0 | |
| 30. Employ oral questioning techniques in a planned lesson to guide student's thinking. | | | 3.0 | | | | | | | | | | 2.9 | 3.1 | |
| [redacted] Conduct a lesson using reinforcement techniques. | - | | 3.0 | 4.0- | 7 | 21 | 7 | 21 | 21 | 14 | 7 | 14 | 2.8 | 3.4 | 2.9 |
| 32. Design a lesson which considers individual differences of students. | | | | | | | | | | | | | 3.2 | 3.6 | |
| [redacted] Present information using illustrations from your occupational specialty. | | | 2.0 | | | | | | | | | | 2.8 | 2.4 | |
| 34. Demonstrate a concept or principle from your occupational speciality. | | | | | | | | | | | | | 2.7 | 2.4 | |
| [redacted] Plan, present and evaluate a lesson as a team teaching member. | | | | | | | | | | | | | 3.6 | 3.9 | |
| 36. Present information using a subject matter expert. | | | | 3.0 | 33 | | 33 | | 33 | | | 3 | 4.0 | 3.6 | 3.3 |
| [redacted] Develop bulletin boards and exhibits. | | | | | | | | | | | | | 3.3 | 3.7 | |
| 38. Present a lesson using models, flannel boards or real objects. | | | 2.0 | | | | | | | | | | 2.9 | 2.8 | |
| [redacted] Present information using overhead or opaque projectors. | + | | 2.0 | 1.9+ | 58 | 8 | 17 | 17 | | | | 12 | 2.5 | 2.7 | 2.4 |
| 40. Present information using films, filmstrips and slides. | | | 2.0 | | | | | | | | | | 2.9 | 2.9 | |
| [redacted] Present information with televised and videotaped materials. | - | | 5.0- | | | | | | | | | | 4.3 | 3.9 | |

# PROFESSIONAL NEEDS ASSESSMENT

HI. | SUPERVISOR 693 | TEACHER [redacted] | STUDENT N=15 | TEACHER FEEDBACK | PROGRAM T + I | DATE ADMIN. | REPORT DATE |  301

| - = RATED LOW BY RATER(S)<br>+ = RATED HIGH BY RATER(S) | ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | | YOUR SCHOOL-S AVERAGES N=32 32 476 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE 1 | LOW 2 | 3 | MEDIUM 4 | HIGH 5 | 6 | VERY HIGH 7 | NUMBER RESPONDING | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | | | | | | | | | SUPERVISOR | TEACHER | STUDENT |
| 42. Present information using records and tapes. | | | | | | | | | | | | | 3.1 | 2.7 | |
| 43. Present information with chalkboard and flip chart. | + | | 2.0 | 2.1+ | 57 | 7 | 14 | 14 | 7 | | | 14 | 2.3 | 2.7 | 2.4 |
| [redacted] | | | 2.5 | | | | | | | | | | 2.9 | 3.1 | |
| 44. Organize and direct students to help instruct other students. | | | 2.0 | | | | | | | | | | 2.8 | 3.2 | |
| 45. Direct independent and group study of students. | | | | | | | | | | | | | 3.0 | 3.1 | |
| 46. Direct individualized or personalized instruction. | | | 3.0 | 3.4 | 21 | 14 | 14 | 29 | 7 | 7 | 7 | 14 | 3.4 | 3.3 | 2.9 |
| 47. Adjust instructional activities or methods to meet the needs and abilities of students. | - | | 2.0 | 3.9- | | 21 | 21 | 29 | 14 | 7 | 7 | 14 | 3.3 | 3.2 | 3.2 |
| 48. Use instructional contracts for individualized or personalized instruction. | | | | | | | | | | | | | 3.4 | 3.2 | |
| 49. Direct programmed instruction. | | | | | | | | | | | | | 3.7 | 2.9 | |
| 50. Review instructional activities and materials to identify and eliminate bias in terms of sex, race, religion, etc. | | | | | | | | | | | | | 2.3 | 3.3 | |
| 51. Identify students who need special assistance to succeed in your vocational program. | - | | 3.0 | 3.9- | | 27 | 20 | 13 | 27 | 7 | 7 | 15 | 3.1 | 3.2 | 3.1 |
| 52. Refer handicapped and disadvantaged students for diagnostic and/or special services. | | | 2.0 | | | | | | | | | | 2.7 | 2.5 | |
| 53. Identify chemical dependent students (e.g., excessive alcohol and drug users). | - | | 5.0- | | | | | | | | | | 3.7 | 3.1 | |
| 54. Refer chemical dependent students to appropriate agencies or services for professional assistance. | -+ | | 5.0- | 1.0+ | 100 | | | | | | | 2 | 2.0 | 3.2 | 2.8 |
| [redacted] | | | 3.1 | | | | | | | | | | 3.0 | 3.1 | |
| 55. Establish standards for student performance. | | | 2.0 | | | | | | | | | | 2.8 | 3.0 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI | SUPERVISOR 603 | TEACHER [redacted] | STUDENT N=15 | TEACHER FEEDBACK | PROGRAM T + I | DATE ADMIN. | REPORT DATE |  301

| + = RATED LOW BY RATER(S)<br>- = RATED HIGH BY RATER(S) | ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | NUMBER RESPONDING | YOUR SCHOOL-S AVERAGES N=32 32 476 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE | LOW | | MEDIUM | HIGH | | VERY HIGH | | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 56. Develop a paper and pencil test to assess student knowledge of the subject. | + | | 3.0 | 2.2+ | 43 | 21 | 7 | 29 | | | | 14 | 2.3 | 2.7 | 2.6 |
| 57. Develop a test or similar device to assess student attitudes toward the subject area. | | | | | | | | | | | | | 4.3 | 4.4 | |
| 58. Develop a test or system to assess the technical skill level of students. | - | | 5.0- | 2.5 | 29 | 21 | 21 | 29 | | | | 14 | 2.6 | 3.4 | 2.6 |
| 59. Determine student grades or performance levels in the program. | + | | 2.0 | 1.9+ | 50 | 14 | 29 | 7 | | | | 14 | 2.5 | 2.8 | 2.4 |
| 60. Evaluate your own instructional effectiveness. | | | 3.0 | | | | | | | | | | 3.7 | 3.8 | |
| **V. INSTRUCTIONAL EVALUATION** | | | 3.0 | | | | | | | | | | | | |
| 61. Identify and plan future instructional resource needs. | | | 2.0 | | | | | | | | | | 3.8 | 3.9 | |
| 62. Prepare financial budgets and reports for your program. | | | 2.0 | | | | | | | | | | 3.7 | 3.2 | |
| 63. Purchase or arrange for purchasing supplies and equipment. | | | 2.0 | | | | | | | | | | 2.9 | 2.6 | |
| 64. Maintain a filing system. | | | 2.0 | 2.5 | 38 | 31 | 8 | | 15 | 8 | | 13 | 2.5 | 3.3 | 2.8 |
| 65. Develop a safety program based on local, state, and federal safety regulations. | | | 3.0 | | | | | | | | | | 2.2 | 3.1 | |
| 66. Explain accident and safety procedures. | | | 2.0 | 2.4 | 23 | 23 | 46 | 8 | | | | 13 | 2.0 | 2.8 | 2.2 |
| 67. Develop a system for administering preventive and corrective classroom discipline. | ++ | | 1.0+ | 2.2+ | 43 | 21 | 14 | 14 | 7 | | | 14 | 2.3 | 3.2 | 2.5 |
| 68. Organize a vocational laboratory. | | | 2.0 | | | | | | | | | | 2.5 | 3.8 | |
| 69. Manage and maintain a vocational laboratory. | | | 2.0 | | | | | | | | | | 2.5 | 3.1 | |
| **VI. INSTRUCTIONAL MANAGEMENT** | | | 2.0 | | | | | | | | | | | | |

# PROFESSIONAL NEEDS ASSESSMENT

VI. SUPERVISOR 603 TEACHER [redacted] STUDENT N=15 — TEACHER FEEDBACK — PROGRAM T + I — DATE ADMIN. REPORT DATE —  301

| + = RATED LOW BY RATER(S) - = RATED HIGH BY RATER(S) | ITEMS TO THINK ABOUT | RATINGS OF ME BY: SUPERVISOR | TEACHER | STUDENTS | SUMMARY OF MY STUDENT RATINGS (PERCENT) NONE 1 | LOW 2 | 3 | MEDIUM 4 | 5 | HIGH 6 | VERY HIGH 7 | NUMBER RESPONDING | YOUR SCHOOL-S AVERAGES 32 SUPERVISOR | TEACHER | 476 STUDENT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70. Clarify your own personal and social values. | + | | 1.0+ | | | | | | | | | | 2.2 | 2.5 | |
| 71. Accept students with different or unique personal social values. | | | 2.0 | 3.0 | | | | | | | | 12 | 2.5 | 2.5 | 2.8 |
| 72. Identify and interpret student personal or cumulative information. | | | | | | | | | | | | | 2.7 | 3.0 | |
| 73. Gather student data through personal contacts. | | | 2.0 | | | | | | | | | | 2.7 | 3.0 | |
| 74. Assist students to identify personal, educational, and career needs through teacher-student conferences. | | | 3.0 | 3.3 | 21 | 7 | 29 | 29 | | 7 | 7 | 14 | 2.8 | 3.2 | 2.8 |
| 75. Provide information on educational and career opportunities. | - | | 2.0 | 3.8- | 18 | | 27 | 18 | 18 | 9 | 9 | 11 | 3.8 | 2.9 | 2.8 |
| 76. Teach job and education seeking skills. | - | | 2.0 | 3.9- | 10 | 10 | 30 | 10 | 20 | 10 | 10 | 10 | 2.7 | 3.0 | 3.0 |
| **VII. GUIDANCE** | | | 2.0 | | | | | | | | | | | | |
| 77. Develop a plan to improve and maintain school-community relations. | | | | | | | | | | | | | 3.9 | 3.7 | |
| 78. Make presentations to school and community groups to promote your program. | | | 3.0 | 2.5 | 33 | 17 | 17 | 33 | | | | 6 | 4.1 | 3.7 | 2.9 |
| 79. Design and provide brochures to inform the school and community about your program. | | | | | | | | | | | | | 4.8 | 3.5 | |
| 80. Design and provide displays in the school and community on your program. | | | | | | | | | | | | | 3.9 | 4.1 | |
| 81. Prepare news releases and articles to promote your program. | | | 3.0 | | | | | | | | | | 4.6 | 4.0 | |
| 82. Plan and present television and radio programs to promote your program. | | | | | | | | | | | | | 5.1 | 4.8 | |
| 83. Plan and conduct an open house for your program. | ++ | | 1.0+ | 2.1+ | 29 | 43 | 14 | 14 | | | | 7 | 3.5 | 2.8 | 2.6 |
| 84. Provide services to members of the community (e.g., adult evening classes). | | | 2.0 | | | | | | | | | | 3.7 | 3.8 | |

# PROFESSIONAL NEEDS ASSESSMENT

MI- | SUPERVISOR 683 | TEACHER [redacted] | STUDENT N=15 | TEACHER FEEDBACK | PROGRAM T + I | DATE ADMIN. | REPORT DATE |  301

| ♦ = RATED LOW BY RATER(S) ▪ = RATED HIGH BY RATER(S) | ITEMS TO THINK ABOUT | RATINGS OF ME BY: SUPERVISOR | TEACHER | STUDENTS | SUMMARY OF MY STUDENT RATINGS (PERCENT) NONE 1 | LOW 2 | 3 | MEDIUM 4 | HIGH 5 | 6 | VERY HIGH 7 | NUMBER RESPONDING | YOUR SCHOOL-S AVERAGES N= 32 SUPERVISOR | 32 TEACHER | 476 STUDENT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 86. Cooperate with state and local educators. | ♦♦ | | 1.0♦ | 2.2♦ | 45 | 18 | 18 | 9 | 9 | | | 11 | 3.0 | 2.8 | 2.0 |
| 88. Obtain feedback from the school and community concerning your program. | | | 2.0 | | | | | | | | | | 3.7 | 3.8 | |
| [redacted] | | | 2.0 | | | | | | | | | | 3.9 | 3.6 | |
| 87. Develop a personal philosophy toward student vocational organizations. | ♦ | | 1.0♦ | | | | | | | | | | 3.7 | 2.6 | |
| 88. Establish a student vocational organization. | | | | | | | | | | | | | 3.7 | 3.5 | |
| 89. Assist students in preparing for leadership roles in student vocational organizations. | | | | 2.7 | 22 | 11 | 44 | 22 | | | | 9 | 3.5 | 3.5 | 2.5 |
| 90. Assist students in developing and financing a yearly program of activities for their vocational organization. | | | | | | | | | | | | | 3.6 | 3.7 | |
| 91. Supervise activities of student vocational organizations. | | | | 2.9 | 40 | | 20 | 20 | 10 | 10 | | 10 | 3.6 | 3.4 | 2.6 |
| 92. Provide learning experiences for students through vocational organization competitive events. | | | | | | | | | | | | | 3.8 | 3.9 | |
| [redacted] | | | 1.0 | | | | | | | | | | 3.6 | 3.4 | |
| 93. Keep up-to-date in your profession and occupational specialty. | ♦ | | 3.0 | 2.2♦ | 29 | 36 | 29 | | 7 | | | 14 | 3.5 | 3.3 | 2.0 |
| 94. Develop and maintain active involvement in professional teaching organizations. | ♦ | | 1.0♦ | | | | | | | | | | 2.9 | 3.2 | |
| 95. Develop and maintain a professional philosophy of education/teaching. | ♦ | | 1.0♦ | 2.6 | 29 | 29 | 14 | 21 | | | 7 | 14 | 3.3 | 2.6 | 2.1 |
| 96. Develop and maintain active involvement in school and community affairs. | ♦ | | 1.0♦ | 3.0 | 38 | | 13 | 38 | | 13 | | 8 | 3.8 | 3.1 | 2.3 |
| 97. Obtain and maintain a teaching position in keeping with your professional qualifications. | ♦ | | 1.0♦ | | | | | | | | | | 2.7 | 2.4 | |
| 98. Plan and provide laboratory experiences for student teachers. | | | | | | | | | | | | | 2.0 | 3.1 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI- | SUPERVISOR 683 | TEACHER [redacted] | STUDENT N=15 | TEACHER FEEDBACK | PROGRAM T + I | DATE ADMIN | REPORT DATE |  301

| * = RATED LOW BY RATER(S)<br>- = RATED HIGH BY RATER(S) | ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | NUMBER RESPONDING | YOUR SCHOOL-S AVERAGES N=32 32 476 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUPERVISOR | TEACHER | STUDENTS | NONE 1 | LOW 2 | 3 | MEDIUM 4 | HIGH 5 | 6 | VERY HIGH 7 | | SUPERVISOR | TEACHER | STUDENT |
| 99. Plan the student teaching experience. | | | | | | | | | | | | | 2.0 | 2.9 | |
| 100. Supervise student teachers. | | | | | | | | | | | | | 2.0 | 2.6 | |
| [redacted] PROFESSIONAL ROLE AND DEVELOPMENT | | | 1.4 | | | | | | | | | | 3.1 | 2.9 | |
| 101. Establish standards and procedures for operating a cooperative vocational education program. | | | | | | | | | | | | | 4.0 | 3.4 | |
| 102. Establish and apply policies for managing student attendance, transfers and terminations. | + | | 1.0+ | | | | | | | | | | 2.5 | 2.5 | |
| 103. Recruit and enroll prospective students. | + | | 1.0+ | | | | | | | | | | 4.2 | 3.5 | |
| 104. Identify and secure prospective training stations for co-op students. | | | | | | | | | | | | | 3.5 | 3.8 | |
| 105. Place co-op students in appropriate training stations. | | | | | | | | | | | | | 3.0 | 3.3 | |
| 106. Develop the training ability of on-the-job supervisors. | | | | | | | | | | | | | 5.3 | 4.5 | |
| 107. Coordinate and supervise on-the-job instruction. | | | | | | | | | | | | | 4.3 | 3.6 | |
| 108. Evaluate on-the-job student performance. | | | | 3.0 | 13 | 33 | 20 | 7 | 27 | | | 15 | 3.5 | 3.7 | 2.4 |
| 109. Plan and conduct related instruction. | | | | | | | | | | | | | 2.8 | 3.0 | |
| 110. Plan and conduct an employer-employee appreciation event or banquet. | | | | | | | | | | | | | 3.3 | 2.7 | |
| [redacted] COORDINATION | | | 1.0 | | | | | | | | | | 3.4 | 3.2 | |
| | | | | | | | | | 11 | 9 | | | | | |

| STATE | SCHOOL | DATE ADMIN. | REPORT DATE |
|---|---|---|---|
| WI | 301 | 11-77 | 5-78 |

**TEACHER FEEDBACK**

Minnesota Research and Development Center for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

| SUPERVISOR | TEACHER | STUDENT | PROGRAM |
|---|---|---|---|
| 555 | 278 | N=21 | T + I |

# STAFF DEVELOPMENT EVALUATION OF INSTRUCTION
## for Vocational Teachers

SCHL AVGS ARE BASED UPON POST SECONDARY RATINGS



| + = ITEMS RATED HIGH BY TCHR AND STDTS<br>- = ITEMS RATED LOW BY TCHR AND STDTS | ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | | YOUR SCHOOL-S AVERAGES N=32 32 477 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUPERVISOR | TEACHER | STUDENTS | NEVER 1 | SELDOM 2 | 3 | SOMETIMES 4 | OFTEN 5 | 6 | ALWAYS 7 | NUMBER RESPONDING | SUPERVISOR | TEACHER | STUDENT |
| 1. Encourages class discussion. | -- | | 5.0- | 3.9- | 5 | 30 | 10 | 15 | 15 | 15 | 10 | 20 | 5.1 | 5.6 | 4.7 |
| 2. Treats students unfairly based on whether they are male or female. | ++ | | 1.0+ | 1.5+ | | | | | | | | 20 | 1.6 | 1.8 | 1. |
| 3. Discusses vocational student organizations (example: VICA, DECA,OEA) in class. | -- | | 2.0- | 2.9- | 14 | 29 | 29 | 19 | 5 | | 5 | 21 | 3.1 | 3.4 | 2.8 |
| 4. Knows when students do not understand something. | | | 6.0 | 4.9 | 5 | | 10 | 19 | 29 | 33 | 5 | 21 | 5.0 | 5.2 | 4. |
| 5. Makes sure that course materials are available to students. | + | | 7.0+ | 5.9 | 5 | | | 10 | 14 | 29 | 43 | 21 | 5.8 | 6.2 | 5.5 |
| 6. Gives tests which require a student to actually perform a skill. | | | 6.0 | 5.5 | 5 | 10 | | 10 | 10 | 29 | 38 | 21 | 5.6 | 5.4 | 4. |
| 7. Praises students for good work. | - | | 6.0 | 4.6- | 10 | 10 | 10 | 19 | 14 | 19 | 29 | 21 | 5.2 | 5.3 | 4.2 |
| 8. Is willing to give his/her time to help individual students. | | | 6.0 | 5.9 | 5 | | 5 | 10 | 10 | 19 | 52 | 21 | 5.5 | 6.2 | 5. |
| 9. Informs students of their progress in the course. | - | | 5.0- | 4.9 | 5 | | 10 | 20 | 30 | 25 | 10 | 20 | 5.2 | 5.5 | 4.5 |
| 10. Treats students unfairly based on what race or religion they are. | ++ | | 1.0+ | 1.2+ | | | | | | | | 21 | 1.4 | 1.5 | 1. |
| 11. Seems prepared for each day's class session. | ++ | | 7.0+ | 6.5+ | 5 | | | | | 19 | 76 | 21 | 6.1 | 5.9 | 6.0 |
| 12. When explaining something, has the facts at his/her fingertips. | | | 6.0 | 5.7 | 5 | 5 | | 5 | 15 | 35 | 35 | 20 | 5.6 | 5.4 | 5. |

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| SUPERVISOR | TEACHER | STUDENT | PROGRAM |
|---|---|---|---|
| 555 | 278 | N=21 | T + I |

# EVALUATION OF INSTRUCTION

## TEACHER FEEDBACK

| STATE | SCHOOL | DATE ADMIN. |
|---|---|---|
| WI | 301 | |

| + = ITEMS RATED HIGH BY TCHR AND STDTS<br>– = ITEMS RATED LOW BY TCHR AND STDTS | ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | NUMBER RESPONDING | YOUR SCHOOL-S AVERAGES N=32 32 477 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUPERVISOR | TEACHER | STUDENTS | NEVER 1 | SELDOM 2 | 3 | SOMETIMES 4 | OFTEN 5 | 6 | ALWAYS 7 | | SUPERVISOR | TEACHER | STUDENT |
| 13. Encourages students to talk about their own ideas. | | | 6.0 | 5.0 | 5 | 10 | 10 | 14 | | 38 | 24 | 21 | 5.3 | 5.3 | 4.7 |
| 14. Explains things clearly. | | | 6.0 | 5.4 | 5 | | 5 | 5 | 29 | 38 | 19 | 21 | 5.3 | 5.3 | 5.3 |
| 15. Provides the opportunity for students to practice new skills. | | | 6.0 | 5.7 | 5 | 5 | | 10 | 10 | 25 | 45 | 20 | 5.8 | 5.8 | 4.9 |
| 16. Uses job-related examples when giving explanations. | + | | 6.0 | 6.3+ | 5 | | | | 5 | 29 | 62 | 21 | 5.6 | 5.8 | 5.3 |
| 17. Shows students how to perform new skills. | + | | 6.0 | 6.2+ | 5 | | | 5 | 10 | 19 | 62 | 21 | 5.9 | 5.7 | 4.9 |
| 18. Asks students to evaluate his/her teaching. | -- | | 4.0– | 4.3– | 5 | 24 | 5 | 19 | 10 | 24 | 14 | 21 | 5.1 | 4.5 | 4.3 |
| 19. Uses competitive events or skill olympics (as in VICA or DECA or FFA) to evaluate student skill performance. | — | | 2.0– | 2.5– | 48 | 14 | 10 | 14 | 5 | 5 | 5 | 21 | 1.9 | 2.0 | 1.9 |
| 20. Makes students feel free to ask questions. | | | 6.0 | 6.1 | 5 | | | 5 | 10 | 25 | 55 | 20 | 5.5 | 6.2 | 5.6 |
| 21. Knows when students need extra help. | | | 6.0 | 5.1 | 5 | 10 | | 14 | 10 | 48 | 14 | 21 | 5.1 | 5.2 | 4.7 |
| 22. Makes sure that all equipment is in working order. | ++ | | 7.0+ | 6.2+ | 5 | | | | 14 | 24 | 57 | 21 | 5.8 | 5.9 | 5.6 |
| 23. Gives assignments that help students learn course content. | | | 6.0 | 5.4 | 5 | | 10 | 14 | 14 | 24 | 33 | 21 | 5.8 | 6.3 | 5.6 |
| 24. Appears to like teaching. | + | | 7.0+ | 5.7 | 5 | | | 19 | 10 | 24 | 43 | 21 | 5.7 | 5.8 | 5.4 |
| 25. Suggests that students discuss test results with him/her. | -- | | 5.0– | 4.5– | 5 | 10 | 10 | 25 | 20 | 10 | 20 | 20 | 5.3 | 5.5 | 4.8 |
| 26. Gives tests that are directly related to the course content. | - | | 5.0– | 5.1 | 5 | | 10 | 14 | 29 | 19 | 24 | 21 | 5.6 | 5.6 | 5.2 |
| 27. Plans instructional activities to meet individual needs of students. | -- | | 4.0– | 4.6– | 5 | 5 | 14 | 33 | 5 | 19 | 19 | 21 | 4.8 | 5.1 | 4.3 |

| SUPERVISOR | TEACHER | STUDENT | PROGRAM |
|---|---|---|---|
| 555 | 278 | N=21 | T + I |

# EVALUATION OF INSTRUCTION

## TEACHER FEEDBACK

| STATE | SCHOOL | DATE ADMIN. | REPORT DATE |
|---|---|---|---|
| WI | 301 | | |

+ = ITEMS RATED HIGH BY TCHR AND STDTS
- = ITEMS RATED LOW BY TCHR AND STDTS

| | ITEMS TO THINK ABOUT | RATINGS OF ME BY: | | | SUMMARY OF MY STUDENT RATINGS (PERCENT) | | | | | | | NUMBER RESPONDING | YOUR SCHOOL-S AVERAGES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | STRONGLY DISAGREE | | | AGREE | | | STRONGLY AGREE | | N=32 | 32 | 477 |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 28. Is unfriendly to students. | | | 2.0 | 2.2 | 57 | 24 | | | 5 | 5 | 10 | 21 | 1.7 | 1.6 | 2.1 |
| 29. Handles course activities in an orderly way | - | | 4.0- | 5.3 | 5 | | | 29 | 14 | 29 | 24 | 21 | 5.3 | 5.2 | 5.2 |
| 30. Encourages students to participate in student organizations (example: VICA, DECA, or FHA). | -- | | 3.0- | 3.7- | 5 | 5 | 43 | 29 | 5 | 10 | 5 | 21 | 3.5 | 4.4 | 3.5 |
| 31. Is more concerned about having students learn than giving grades. | + | | 7.0+ | 5.5 | 5 | 5 | 5 | 19 | 5 | 10 | 52 | 21 | 5.3 | 6.1 | 5.3 |
| 32. Appears to have complete knowledge of the subject he/she teaches. | ++ | | 7.0+ | 6.2+ | 5 | | | 10 | 5 | 14 | 67 | 21 | 5.6 | 5.6 | 5.9 |
| 33. Tells students what they must do or learn in order to successfully complete the course. | + | | 7.0+ | 5.4 | 5 | | 5 | 14 | 24 | 19 | 33 | 21 | 5.7 | 6.0 | 5.3 |
| 34. Appears interested in the occupational field he/she teaches. | + | | 7.0+ | 6.0 | 5 | | 5 | 14 | | 14 | 62 | 21 | 6.2 | 6.6 | 5.9 |
| 35. Seems to be concerned about each student. | + | | 7.0+ | 5.2 | 5 | | 5 | 29 | 10 | 24 | 29 | 21 | 5.3 | 6.1 | 5.0 |
| 36. Appears to have a good background of occupational experience. | ++ | | 7.0+ | 6.5+ | 5 | | | 5 | 5 | | 86 | 21 | 5.6 | 5.7 | 5.7 |
| 37. Works closely with students who have special needs. | - | | 5.0- | 5.0 | 5 | 5 | 5 | 29 | 10 | 19 | 29 | 21 | 5.1 | 5.1 | 4.4 |

| SUPERVISOR | TEACHER | STUDENT | PROGRAM | STATE | SCHOOL | DATE ADMIN. | REPORT DATE | PAGE 4 |
|---|---|---|---|---|---|---|---|---|
| 555 | 278 | N=21 | T + I | WI | 301 | | | |

TOTALS WILL NOT EQUAL 100 PCT. IF THERE ARE OMITS (ITEMS 1-9)

## TEACHER FEEDBACK
## EVALUATION OF INSTRUCTION

SUMMARY OF MY STUDENT RATINGS (PERCENT)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Overall ability to teach. | | | | | | | 3. How much do you like this instructor personally? | 1 | 2 | 3 30 | 4 15 | 5 55 | 4.7 |
| TEACHER RATING | 1 | 2 | 3 | X | 5 | | 4. How much do you like the content of this occupational program? | 1 5 | 2 | 3 | 4 25 | 5 70 | 4.5 |
| STUDENT RATING | 5 1 | 2 | 15 3 | 35 4 | 45 5 | 4.2 | 5. Has the instructor changed the way you feel about this occupational program? | 1 | 2 | 3 45 | 4 15 | 5 40 | 4.0 |
| SUPERVISOR RATING | 1 | 2 | 3 | 4 | 5 | | | | | | | | |
| 2. Overall technical knowledge of the occupational program. | | | | | | | 6. How much effort have you put into this course? | 1 | 2 | 3 35 | 4 55 | 5 10 | 3.8 |
| TEACHER RATING | 1 | 2 | 3 | 4 | 5X | | 7. How much has this instructor increased your technical knowledge? | 1 5 | 2 5 | 3 35 | 4 55 | 5 0 | 4.0 |
| STUDENT RATING | 5 1 | 2 | 3 | 10 4 | 60 5 | 4.6 | 8. How much has this instructor improved your skill performance? | 1 5 | 2 5 | 3 25 | 4 45 | 5 20 | 3.9 |
| SUPERVISOR RATING | 1 | 2 | 3 | 4 | 5 | | | | | | | | |
| | | | | | | | 9. Rate your occupational achievement in this course relative to other students. | 1 | 2 5 | 3 50 | 4 40 | 5 5 | 3.5 |

| | | | | | | X INDICATES YOUR SELF RATING * | SUPERVISOR | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| 1 | 2 | 3 X | 4 | 5 | | 10. Overall proficiency in instructional planning. | 1 | 2 | 3 | 4 | 5 | |
| 1 | 2 | 3 | 4 X | 5 | | 11. Overall proficiency in instructional delivery. | 1 | 2 | 3 | 4 | 5 | |
| 1 | 2 | 3 X | 4 | 5 | | 12. Overall proficiency in instructional evaluation. | 1 | 2 | 3 | 4 | 5 | |
| | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 X | 5 | | 13. During the past year, how often has your supervisor visited your classroom or shop while in session? | 1 | 2 | 3 | 4 | 5 | |
| 1 | 2 | 3 X | 4 | 5 | | 14. During the past year, how often have you had a discussion with your supervisor about your progress and/or concerns? | 1 | 2 | 3 | 4 | 5 | |
| | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 X | | 15. How long has your supervisor been supervising your instructional activities? | 1 | 2 | 3 | 4 | 5 | |

## Appendix D:
## SAMPLE COMPUTERIZED SCHOOL FEEDBACK REPORT

1. Professional Needs Assessment

2. Evaluation of Instruction

| STATE | SCHOOL | DATE ADMIN. | REPORT DATE |
|---|---|---|---|
| MI | 301 | 11-77 | 7-78 |

| SUPERVISOR | TEACHER | STUDENT | PROGRAM |
|---|---|---|---|
| N=32 | N=32 | N=476 | |

**SCHOOL FEEDBACK**

Minnesota Research and Development Center for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

# STAFF DEVELOPMENT
# PROFESSIONAL NEEDS ASSESSMENT
## for Vocational Teachers

AVERAGES ARE BASED UPON POST-SECONDARY RATINGS



REPORT 4

\+ = RATED LOW BY RATERS
\- = RATED HIGH BY RATERS

| ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=32 32 476 | | | TEACHER RATINGS (PERCENT) FOR SCHOOL 301 | | | | | | | | STATE AVERAGES N=5 SCHOOLS N=143 126 1937 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SUPERVISOR | TEACHER | STUDENTS | NONE 1 | LOW 2 | 3 | MEDIUM 4 | HIGH 5 | 6 | VERY HIGH 7 | NUMBER RESPONDING | SUPERVISOR | TEACHER | STUDENT |
| 1. Plan a community survey to identify local employer demands and student occupational interests. | 3.9 | 3.3 | | | 37 | 21 | 21 | 16 | 5 | | 19 | 4.1 | 3.3 | - |
| 2. Collect and interpret employer demand and student occupational interest information. | 3.7 | 3.5 | 2.7 | | 30 | 25 | 20 | 20 | 5 | | 20 | 4.0 | 3.5 | |
| 3. Apply the findings of a community survey to your vocational program. | 3.5 | 3.3 | | | 32 | 23 | 32 | 9 | 5 | | 22 | 3.7 | 2.9 | |
| 4. Organize or reorganize an occupational advisory committee. + | 3.5 | 2.2+ | | 33 | 25 | 38 | | | | 4 | 24 | 3.6 | 2.5 | |
| 5. Maintain an occupational advisory committee. + | 3.4 | 2.1+ | | 28 | 56 | 8 | 4 | | | 4 | 25 | 3.9 | 2.1 | |
| 6. Use an advisory committee to set vocational program goals and objectives. + | 3.4 | 2.5+ | | 15 | 44 | 22 | 15 | 4 | | | 27 | 3.8 | 2.7 | |
| 7. Develop long-range plans for your vocational program. - | 4.4- | 4.0- | | 4 | 8 | 25 | 25 | 21 | 13 | 4 | 24 | 4.3 | 3.2 | |
| 8. Conduct an occupational analysis to identify entry-level occupational competencies for your vocational program. - | 4.0 | 4.1- | | | 17 | 29 | 13 | 21 | 13 | 8 | 24 | 4.0 | 3.4 | |
| 9. Conduct a continuous student follow-up study of former students. | 3.5 | 3.2 | 2.6 | 4 | 38 | 17 | 25 | 13 | 4 | | 24 | 4.1 | 2.8 | 2.6 |
| 10. Evaluate your vocational program. - | 4.3- | 3.1 | 2.6 | 7 | 37 | 22 | 19 | 7 | 4 | 4 | 27 | 3.9 | 2.9 | |
| I. PROGRAM PLANNING, DEVELOPMENT AND EVALUATION | 3.8 | 3.2 | | | | | | | | | | | | |

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# PROFESSIONAL NEEDS ASSESSMENT

WI | SUPERVISOR N=32 | TEACHER N=32 | STUDENT N=476 | SCHOOL FEEDBACK | PROGRAM | DATE ADMIN. 11-77 | REPORT DATE 7-78 |  301

| + = RATED LOW BY RATERS<br>- = RATED HIGH BY RATERS | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=32 32 476 | | | TEACHER RATINGS (PERCENT) FOR SCHOOL 301 | | | | | | | | STATE AVERAGES N=5 SCHOOLS N=143 126 1937 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE | LOW | | MEDIUM | HIGH | | VERY HIGH | NUMBER RESPONDING | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 11. Develop a philosophy for your vocational program. | | 2.9 | 2.6 | | 11 | 44 | 30 | 7 | 7 | | | 27 | 3.2 | 2.1 | |
| 12. Develop a course of study. | | 2.9 | 2.8 | | 10 | 32 | 35 | 13 | 6 | 3 | | 31 | 3.4 | 2.4 | |
| 13. Determine and analyze the instructional needs of students. | | 3.2 | 3.4 | | 3 | 19 | 35 | 26 | 10 | 6 | | 31 | 3.7 | 2.7 | |
| 14. Write student performance objectives. | | 3.6 | 3.5 | 2.5 | 10 | 28 | 10 | 21 | 17 | 14 | | 29 | 3.5 | 2.5 | 2.3 |
| 15. Plan and write a unit of instruction. | | 3.3 | 2.8 | | 13 | 43 | 10 | 17 | 13 | 3 | | 30 | 3.2 | 2.4 | |
| 16. Write a lesson plan. | + | 2.5 | 2.1+ | 2.6 | 26 | 55 | 6 | 10 | | 3 | | 31 | 3.0 | 2.1 | 2.4 |
| 17. Obtain appropriate student instructional materials. | | 2.6 | 2.8 | | 6 | 50 | 22 | 16 | | 3 | 3 | 32 | 3.1 | 2.4 | |
| 18. Design and prepare teacher-made instructional materials. | | 2.9 | 3.1 | 2.7 | 10 | 35 | 19 | 19 | 6 | 10 | | 31 | 3.2 | 3.0 | 2.4 |
| **II. INSTRUCTIONAL PLANNING** | | 3.0 | 2.9 | | 3 | 25 | 50 | 19 | | 3 | | 32 | 3.3 | 2.5 | |
| 19. Organize and introduce a lesson. | + | 2.4 | 2.5+ | 2.7 | 9 | 50 | 25 | 13 | | 3 | | 32 | 3.0 | 2.2 | 2.3 |
| 20. Summarize a lesson for students. | | 2.3 | 2.9 | | 6 | 38 | 38 | 6 | 9 | | 3 | 32 | 3.1 | 2.3 | |
| 21. Demonstrate a manipulative skill. | + | 2.3 | 2.5+ | 2.7 | 12 | 56 | 16 | 8 | 4 | 4 | | 25 | 2.7 | 2.0 | 2.5 |
| 22. Give a lecture. | | 2.5 | 3.1 | 2.6 | 9 | 41 | 22 | 9 | 6 | 6 | 6 | 32 | 3.0 | 2.4 | 2.5 |
| 23. Direct individual and/or group field trips. | - | 4.0 | 3.2 | 3.5- | 7 | 34 | 17 | 24 | 10 | 7 | | 29 | 3.2 | 2.9 | 3.0 |
| 24. Conduct group discussions, panel discussions and symposiums. | | 3.2 | 3.3 | | 4 | 21 | 33 | 25 | 13 | 4 | | 24 | 3.4 | 2.8 | |
| 25. Stimulate learning through brainstorming and buzz groups. | | 3.3 | 3.7 | | 4 | 26 | 9 | 30 | 17 | 13 | | 23 | 3.4 | 3.1 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI | SUPERVISOR N=32 | TEACHER N=32 | STUDENT N=476 | SCHOOL FEEDBACK | PROGRAM | DATE ADMIN. REPORT DATE 11-77 - 7-78 |  301

+ = RATED LOW BY RATERS
- = RATED HIGH BY RATERS

| | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=32 32 476 | | | TEACHER RATINGS (PERCENT) FOR SCHOOL 301 | | | | | | | | STATE AVERAGES N=4 SCHOOLS N=143 126 1937 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE | LOW | | MEDIUM | HIGH | | VERY HIGH | NUMBER RESPONDING | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 26. Facilitate student learning through role playing techniques. | | 3.1 | 3.7 | | | 22 | 22 | 33 | 11 | 11 | | 18 | 3.1 | 3.0 | |
| 27. Organize and direct student laboratory experiences. | | 2.5 | 3.1 | 2.6 | 7 | 44 | 26 | 4 | 4 | 4 | 11 | 27 | 2.9 | 2.5 | 2.5 |
| 28. Direct students in applying problem-solving techniques. | | 2.9 | 3.4 | | | 31 | 31 | 19 | 6 | 13 | | 32 | 3.2 | 2.7 | |
| 29. Direct students in acquiring skills, attitudes, or concepts using the project method. | | 2.7 | 3.0 | | 15 | 15 | 37 | 26 | 7 | | | 27 | 3.1 | 2.6 | |
| 30. Employ oral questioning techniques in a planned lesson to guide student's thinking. | | 2.9 | 3.1 | | 6 | 19 | 45 | 19 | 10 | | | 31 | 3.4 | 2.6 | |
| 31. Conduct a lesson using reinforcement techniques. | - | 2.8 | 3.4 | 2.9- | 7 | 13 | 43 | 20 | 7 | 10 | | 30 | 3.3 | 2.6 | 2.7 |
| 32. Design a lesson which considers individual differences of students. | | 3.2 | 3.6 | | 7 | 15 | 30 | 22 | 11 | 11 | 4 | 27 | 3.5 | 3.1 | |
| 33. Present information using illustrations from your occupational speciality. | + | 2.8 | 2.4+ | | 21 | 39 | 32 | | | 7 | | 28 | 3.0 | 2.2 | |
| 34. Demonstrate a concept or principle from your occupational speciality. | + | 2.7 | 2.4+ | | 11 | 63 | 15 | | 11 | | | 27 | 2.9 | 2.1 | |
| 35. Plan, present and evaluate a lesson as a team teaching member. | | 3.6 | 3.9 | | 7 | 20 | 13 | 27 | 20 | | 13 | 15 | 3.3 | 3.0 | |
| 36. Present information using a subject matter expert. | - | 4.0 | 3.6 | 3.3- | 8 | 8 | 21 | 42 | 17 | 4 | | 24 | 3.2 | 3.1 | 3.1 |
| 37. Develop bulletin boards and exhibits. | | 3.3 | 3.7 | | 4 | 17 | 29 | 17 | 25 | 8 | | 24 | 3.4 | 3.3 | |
| 38. Present a lesson using models, flannel boards or real objects. | | 2.9 | 2.8 | | 4 | 38 | 42 | 8 | 4 | 4 | | 26 | 3.0 | 2.6 | |
| 39. Present information using overhead or opaque projectors. | + | 2.5 | 2.7 | 2.4+ | 19 | 32 | 23 | 16 | 6 | 3 | | 31 | 3.0 | 2.5 | 2.3 |
| 40. Present information using films, filmstrips and slides. | | 2.9 | 2.9 | | 16 | 29 | 29 | 10 | 10 | 6 | | 31 | 2.9 | 2.4 | |
| 41. Present information with televised and videotaped materials. | - | 4.3- | 3.9 | | 8 | 13 | 21 | 21 | 17 | 17 | 4 | 24 | 3.4 | 3.3 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI | SUPERVISOR N=32 | TEACHER N=32 | STUDENT N=476 | SCHOOL FEEDBACK | PROGRAM | DATE ADMIN. 11-77 | REPORT DATE 7-78 |  301

| + = RATED LOW BY RATERS<br>- = RATED HIGH BY RATERS | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=32 32 476 | | | TEACHER RATINGS (PERCENT) FOR SCHOOL 301 | | | | | | | | STATE AVERAGES N=5 SCHOOLS N=143 126 1937 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE | LOW | | MEDIUM | HIGH | | VERY HIGH | NUMBER RESPONDING | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 42. Present information using records and tapes. | | 3.1 | 2.7 | | 24 | 28 | 16 | 16 | 16 | | | 25 | 3.0 | 2.4 | |
| 43. Present information with chalkboard and flip chart. | + | 2.3 | 2.7 | 2.4+ | 14 | 41 | 24 | 10 | 3 | 7 | | 29 | 2.9 | 2.2 | 2.2 |
| III. INSTRUCTIONAL TECHNIQUES | | 2.9 | 3.1 | | 3 | 3 | 69 | 22 | 13 | | | 32 | 3.1 | 2.6 | |
| 44. Organize and direct students to help instruct other students. | | 2.8 | 3.2 | | 3 | 23 | 45 | 16 | 6 | 6 | | 31 | 3.2 | 2.8 | |
| 45. Direct independent and group study of students. | | 3.0 | 3.1 | | 4 | 39 | 18 | 29 | 4 | 4 | 4 | 28 | 3.2 | 2.8 | |
| 46. Direct individualized or personalized instruction. | - | 3.4 | 3.3 | 2.9+ | 7 | 23 | 30 | 23 | 7 | 7 | 3 | 30 | 3.5 | 2.6 | 2.6 |
| 47. Adjust instructional activities or methods to meet the needs and abilities of students. | - | 3.3 | 3.2 | 3.2+ | 6 | 28 | 25 | 28 | 6 | 6 | | 32 | 3.4 | 2.8 | 2.8 |
| 48. Use instructional contracts for individualized or personalized instruction. | | 3.4 | 3.2 | | 12 | 24 | 18 | 35 | 6 | 6 | | 17 | 3.5 | 3.2 | |
| 49. Direct programmed instruction. | | 3.7 | 2.9 | | 18 | 24 | 29 | 12 | 12 | 6 | | 17 | 3.3 | 2.9 | |
| 50. Review instructional activities and materials to identify and eliminate bias in terms of sex, race, religion, etc. | | 2.3 | 3.2 | | 8 | 25 | 33 | 17 | | 17 | | 12 | 2.9 | 2.5 | |
| 51. Identify students who need special assistance to succeed in your vocational program. | - | 3.1 | 3.2 | 3.1+ | 10 | 20 | 37 | 17 | 7 | 10 | | 30 | 3.3 | 2.8 | 2.9 |
| 52. Refer handicapped and disadvantaged students for diagnostic and/or special services. | + | 2.7 | 2.5+ | | 14 | 45 | 27 | 5 | 5 | 5 | | 22 | 3.3 | 2.3 | |
| 53. Identify chemical dependent students (e.g., excessive alcohol and drug users). | | 3.7 | 3.1 | | 20 | 20 | 24 | 16 | 12 | 4 | 4 | 25 | 3.5 | 3.0 | |
| 54. Refer chemical dependent students to appropriate agencies or services for professional assistance. | + | 2.0+ | 3.2 | 2.8 | 9 | 26 | 26 | 22 | 13 | | 4 | 23 | 3.1 | 3.0 | 2.5 |
| IV. PERSONALIZED INSTRUCTION | | 3.0 | 3.1 | | | 22 | 53 | 16 | 9 | | | 32 | 3.3 | 2.8 | |
| 55. Establish standards for student performance. | | 2.8 | 3.0 | | 6 | 39 | 23 | 19 | 6 | 6 | | 31 | 3.2 | 2.4 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI | SUPERVISOR N=32 | TEACHER N=32 | STUDENT N=476 | SCHOOL FEEDBACK | PROGRAM | DATE ADMIN. 11-77 | REPORT DATE 7-78 | PAGE 5 | 301

| + = RATED LOW BY RATERS<br>- = RATED HIGH BY RATERS | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=32 32 476 | | | TEACHER RATINGS (PERCENT) FOR SCHOOL 301 | | | | | | | | STATE AVERAGES N=5 SCHOOLS N=143 126 1937 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE | LOW | | MEDIUM | | HIGH | | VERY HIGH | NUMBER RESPONDING | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 56. Develop a paper and pencil test to assess student knowledge of the subject. | | 2.3 | 2.7 | 2.6 | 19 | 32 | 23 | 16 | 3 | 3 | 3 | 31 | 3.1 | 2.4 | 2.5 |
| **57. Develop a test or similar device to assess student attitudes toward the subject area.** | - - | 4.3- | 4.4- | | | 12 | 15 | 27 | 19 | 23 | 4 | 26 | 4.0 | 3.6 | |
| 58. Develop a test or system to assess the technical skill level of students. | | 2.6 | 3.4 | 2.6 | 3 | 33 | 17 | 20 | 17 | 10 | | 30 | 3.1 | 2.5 | 2.4 |
| **59. Determine student grades or performance levels in the program.** | + | 2.5 | 2.8 | 2.4+ | 9 | 38 | 34 | 6 | 9 | 3 | | 32 | 3.3 | 2.3 | 2.2 |
| 60. Evaluate your own instructional effectiveness. | | 3.7 | 3.8 | | | 9 | 31 | 38 | 13 | 6 | 3 | 32 | 3.7 | 3.1 | |
| **V. INSTRUCTIONAL EVALUATION** | | 3.0 | 3.3 | | | 13 | 53 | 22 | 6 | 6 | | 32 | 3.4 | 2.7 | |
| 61. Identify and plan future instructional resource needs. | | 3.8 | 3.9 | | 3 | 17 | 27 | 17 | 17 | 17 | 3 | 30 | 3.3 | 3.3 | |
| **62. Prepare financial budgets and reports for your program.** | | 3.7 | 3.2 | | 4 | 38 | 29 | 8 | 13 | 4 | 4 | 24 | 3.4 | 2.7 | |
| 63. Purchase or arrange for purchasing supplies and equipment. | | 2.9 | 2.6 | | 7 | 61 | 11 | 14 | 4 | 4 | | 28 | 2.9 | 2.4 | |
| **64. Maintain a filing system.** | + | 2.5 | 3.3 | 2.4+ | 3 | 31 | 28 | 19 | 9 | 3 | 6 | 32 | 2.8 | 2.9 | 2.3 |
| 65. Develop a safety program based on local, state, and federal safety regulations. | + | 2.2+ | 3.1 | | 11 | 22 | 33 | 17 | 11 | 6 | | 18 | 3.0 | 2.9 | |
| **66. Explain accident and safety procedures.** | + + | 2.0+ | 2.8 | 2.2+ | 5 | 52 | 14 | 19 | 5 | 5 | | 21 | 2.7 | 2.4 | 2.1 |
| 67. Develop a system for administering preventive and corrective classroom discipline. | | 2.3 | 3.2 | 2.5 | 8 | 33 | 8 | 33 | 17 | | | 24 | 2.6 | 2.6 | 2.3 |
| **68. Organize a vocational laboratory.** | | 2.5 | 3.0 | | 13 | 33 | 27 | 13 | | 7 | 7 | 15 | 2.5 | 2.5 | |
| 69. Manage and maintain a vocational laboratory. | | 2.5 | 3.1 | | 11 | 32 | 21 | 21 | 5 | 11 | | 19 | 3.0 | 2.5 | |
| **VI. INSTRUCTIONAL MANAGEMENT** | | 2.8 | 3.2 | | 7 | 16 | 56 | 19 | 7 | 7 | | 32 | 2.0 | 2.7 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI | SUPERVISOR N=32 | TEACHER N=32 | STUDENT N=476 | SCHOOL FEEDBACK | PROGRAM | DATE ADMIN 11-77 | REPORT DATE 7-78 | PAGE 6 | 301

| + = RATED LOW BY RATERS<br>- = RATED HIGH BY RATERS | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=32 32 476 | | | TEACHER RATINGS (PERCENT) FOR SCHOOL 301 | | | | | | | | STATE AVERAGES N=5 SCHOOLS N=143 126 1937 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE | LOW | | MEDIUM | HIGH | | VERY HIGH | NUMBER RESPONDING | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 70. Clarify your own personal and social values. | ++ | 2.2+ | 2.5+ | | 11 | 50 | 25 | 4 | 11 | | | 28 | 2.9 | 2.2 | |
| 71. Accept students with different or unique personal social values. | ++ | 2.5 | 2.5+ | 2.3+ | 19 | 45 | 16 | 10 | 6 | 3 | | 31 | 2.9 | 2.1 | 2.1 |
| 72. Identify and interpret student personal or cumulative information. | | 2.7 | 3.0 | | 8 | 32 | 28 | 20 | 8 | 4 | | 25 | 2.9 | 2.7 | |
| 73. Gather student data through personal contacts. | | 2.7 | 3.0 | | 13 | 33 | 25 | 13 | 8 | 8 | | 24 | 3.0 | 2.7 | |
| 74. Assist students to identify personal, educational, and career needs through teacher-student conferences. | | 2.8 | 3.2 | 2.8 | 7 | 18 | 39 | 25 | 7 | 4 | | 28 | 3.1 | 2.8 | 2.6 |
| 75. Provide information on educational and career opportunities. | | 3.0 | 2.9 | 2.8 | 6 | 42 | 23 | 16 | 10 | 3 | | 31 | 3.1 | 2.5 | 2.7 |
| 76. Teach job and education seeking skills. | - | 2.7 | 3.0 | 3.0- | 11 | 26 | 30 | 19 | 11 | 4 | | 27 | 3.0 | 2.5 | 2.9 |
| **VII. GUIDANCE** | | 2.7 | 2.8 | | 9 | 25 | 47 | 13 | 3 | 3 | | 32 | 3.0 | 2.5 | |
| 77. Develop a plan to improve and maintain school-community relations. | | 3.9 | 3.7 | | 11 | 11 | 21 | 32 | 11 | 16 | | 19 | 3.7 | 3.3 | |
| 78. Make presentations to school and community groups to promote your program. | - | 4.1 | 3.7 | 2.9- | 4 | 16 | 32 | 16 | 20 | 12 | | 25 | 3.5 | 3.4 | 2.6 |
| 79. Design and provide brochures to inform the school and community about your program. | - | 4.8- | 3.5 | | 10 | 20 | 25 | 15 | 15 | 15 | | 20 | 3.7 | 3.5 | |
| 80. Design and provide displays in the school and community on your program. | - | 3.9 | 4.1- | | 4 | 9 | 26 | 13 | 26 | 22 | | 23 | 3.8 | 3.8 | |
| 81. Prepare news releases and articles to promote your program. | -- | 4.6- | 4.0- | | 9 | 9 | 23 | 23 | 14 | 18 | 5 | 22 | 4.2 | 4.0 | |
| 82. Plan and present television and radio programs to promote your program. | -- | 5.1- | 4.0- | | 6 | 12 | 18 | 29 | 12 | 24 | | 17 | 3.9 | 4.1 | |
| 83. Plan and conduct an open house for your program | | 3.5 | 2.8 | 2.6 | 11 | 42 | 26 | 5 | 5 | 11 | | 19 | 3.4 | 2.5 | 2.6 |
| 84. Provide services to members of the community (e.g., adult evening classes). | | 3.3 | 3.5 | | 15 | 19 | 8 | 31 | 15 | 12 | | 26 | 3.8 | 2.7 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI | SUPERVISOR N=32 TEACHER N=32 STUDENT N=476 | SCHOOL FEEDBACK | PROGRAM | DATE ADMIN 11-77 REPORT DATE 7-78 | PAGE 7 301

| + = RATED LOW BY RATERS<br>- = RATED HIGH BY RATERS | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=32 32 476 | | | TEACHER RATINGS (PERCENT) FOR SCHOOL 301 | | | | | | | | STATE AVERAGES N=5 SCHOOLS N=143 126 1937 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE | LOW | | MEDIUM | | HIGH | VERY HIGH | NUMBER RESPONDING | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 85. Cooperate with state and local educators. | + | 3.0 | 2.8 | 2.0+ | 17 | 23 | 37 | 17 | | 7 | | 30 | 3.2 | 2.3 | 1.9 |
| 86. Obtain feedback from the school and community concerning your program. | | 3.7 | 3.8 | | 3 | 10 | 28 | 38 | 3 | 14 | 3 | 29 | 3.4 | 3.1 | |
| **VIII. SCHOOL-COMMUNITY RELATIONS** | | 3.9 | 3.6 | | 3 | 16 | 34 | 25 | 16 | 6 | | 32 | 3.6 | 3.1 | |
| 87. Develop a personal philosophy toward student vocational organizations. | | 3.7 | 2.6 | | 27 | 31 | 19 | 8 | 12 | 4 | | 26 | 3.3 | 2.4 | |
| 88. Establish a student vocational organization. | | 3.7 | 3.5 | | 29 | 7 | 14 | 21 | | 21 | 7 | 14 | 3.7 | 2.5 | |
| 89. Assist students in preparing for leadership roles in student vocational organizations. | | 3.5 | 3.5 | 2.5 | 10 | 19 | 24 | 24 | 10 | 14 | | 21 | 3.7 | 2.9 | 2.4 |
| 90. Assist students in developing and financing a yearly program of activities for their vocational organization. | | 3.6 | 3.7 | | 13 | 20 | 7 | 27 | 7 | 27 | | 15 | 3.7 | 3.1 | |
| 91. Supervise activities of student vocational organizations. | | 3.6 | 3.4 | 2.6 | 21 | 21 | 7 | 14 | 14 | 21 | | 14 | 3.8 | 2.9 | 2.4 |
| 92. Provide learning experiences for students through vocational organization competitive events. | | 3.8 | 3.9 | | 6 | 17 | 17 | 33 | | 22 | 6 | 18 | 3.7 | 3.0 | |
| **IX. STUDENT VOCATIONAL ORGANIZATIONS** | | 3.6 | 3.2 | | 15 | 19 | 30 | 15 | 4 | 19 | | 27 | 3.6 | 3.1 | |
| 93. Keep up-to-date in your profession and occupational specialty. | + | 3.5 | 3.3 | 2.0+ | 10 | 16 | 29 | 32 | 6 | 3 | 3 | 31 | 3.3 | 2.8 | 1.9 |
| 94. Develop and maintain active involvement in professional teaching organizations. | | 2.9 | 3.2 | | 3 | 28 | 31 | 28 | 7 | | 3 | 29 | 3.2 | 3.0 | |
| 95. Develop and maintain a professional philosophy of education/teaching. | + | 3.3 | 2.6 | 2.1+ | 18 | 32 | 32 | 7 | 7 | 4 | | 28 | 3.0 | 2.4 | 2.0 |
| 96. Develop and maintain active involvement in school and community affairs. | + | 3.8 | 3.1 | 2.3+ | 10 | 33 | 17 | 23 | 10 | 7 | | 30 | 3.4 | 2.9 | 2.2 |
| 97. Obtain and maintain a teaching position in keeping with your professional qualifications. | + | 2.7 | 2.4+ | | 29 | 39 | 16 | 6 | | 10 | | 31 | 2.9 | 2.2 | |
| 98. Plan and provide laboratory experiences for student teachers. | + | 2.8+ | 3.1 | | 8 | 33 | 25 | 17 | 8 | 8 | | 12 | 2.7 | 3.9 | |

# PROFESSIONAL NEEDS ASSESSMENT

WI SUPERVISOR N=32 TEACHER N=32 STUDENT N=476 SCHOOL FEEDBACK PROGRAM DATE ANNUAL REPORT DATE 11-77 7-78 PAGE 301

\+ = RATED LOW BY RATERS
\- = RATED HIGH BY RATERS

| | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=32 32 476 | | | TEACHER RATINGS (PERCENT) FOR SCHOOL 301 | | | | | | | | STATE AVERAGES N=5 SCHOOLS N=143 126 1937 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NONE | LOW | | MEDIUM | HIGH | | VERY HIGH | NUMBER RESPONDING | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 99. Plan the student teaching experience. | + | 2.0+ | 2.9 | | 11 | 22 | 44 | 11 | 11 | | | 9 | 2.6 | 3.0 | |
| 100. Supervise student teachers. | + | 2.0+ | 2.6 | | 10 | 60 | 10 | | 20 | | | 10 | 2.5 | 3.0 | |
| **X. PROFESSIONAL ROLE AND DEVELOPMENT** | | 3.1 | 2.9 | | 10 | 26 | 52 | | 10 | 3 | | 31 | 3.1 | 2.7 | |
| 101. Establish standards and procedures for operating a cooperative vocational education program. | | 4.0 | 3.4 | | | 25 | 38 | 13 | 25 | | | 8 | 3.0 | 3.3 | |
| 102. Establish and apply policies for managing student attendance, transfers and terminations. | + | 2.5 | 2.5+ | | 19 | 33 | 33 | 10 | 5 | | | 21 | 2.9 | 2.7 | |
| 103. Recruit and enroll prospective students. | | 4.2 | 3.5 | | 8 | 17 | 29 | 21 | 17 | 4 | 4 | 24 | 3.7 | 3.3 | |
| 104. Identify and secure prospective training stations for co-op students. | | 3.5 | 3.8 | | | | 25 | 75 | | | | 4 | 2.0 | 3.6 | |
| 105. Place co-op students in appropriate training stations. | | 3.0 | 3.3 | | | | 67 | 33 | | | | 3 | 2.3 | 3.4 | |
| 106. Develop the training ability of on-the-job supervisors. | -- | 5.3- | 4.5- | | | 25 | | 25 | | 50 | | 4 | 3.7 | 3.5 | |
| 107. Coordinate and supervise on-the-job instruction. | - | 4.3- | 3.6 | | | 14 | 29 | 43 | 14 | | | 7 | 3.0 | 2.9 | |
| 108. Evaluate on-the-job student performance. | + | 3.5 | 3.7 | 2.4+ | | 14 | 29 | 29 | 29 | | | 7 | 3.1 | 2.8 | 2.3 |
| 109. Plan and conduct related instruction. | | 2.8 | 3.0 | | 6 | 35 | 24 | 24 | 12 | | | 17 | 3.0 | 2.7 | |
| 110. Plan and conduct an employer-employee appreciation event or banquet. | | 3.3 | 2.7 | | 33 | | 50 | | 17 | | | 6 | 2.2 | 3.1 | |
| **XI. COORDINATION** | | 3.4 | 3.1 | | 10 | 24 | 34 | 21 | 7 | | 3 | 29 | 3.1 | 3.0 | |



199

[redacted] REPORT DATE
11-77 11-78

SCHOOL FEEDBACK

Minnesota Research and Development Center for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

[redacted] TEACHER STUDENT PROGRAM
N=29 N=14 N=189

# STAFF DEVELOPMENT EVALUATION OF INSTRUCTION
## for Vocational Teachers



SECONDARY RATINGS

REPORT 4

| + = ITEMS RATED HIGH BY RATERS<br>- = ITEMS RATED LOW BY RATERS | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=29 14 189 | | | TEACHER RATINGS (PERCENT) FOR THIS SCHOOL | | | | | | | NUMBER RESPONDING | STATE AVERAGES SCHOOLS N=68 66 849 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUPERVISOR | TEACHER | STUDENTS | NEVER 1 | SELDOM 2 | 3 | SOMETIMES 4 | OFTEN 5 | 6 | ALWAYS 7 | | SUPERVISOR | TEACHER | STUDENT |
| 1. Encourages class discussion. | - - | 5.5- | 6.2 | 4.7- | | | | 8 | 8 | 38 | 46 | 13 | 5.5 | 6.1 | 4.7 |
| 2. Treats students unfairly based on whether they are male or female. | + + | 1.1+ | 1.5 | 1.9+ | 92 | | | | | | 8 | 12 | 1.1 | 1.7 | 1.8 |
| 3. Discusses vocational student organizations (example: VICA, DECA,OEA) in class. | --- | 5.5- | 5.5- | 4.6- | | 7 | | 21 | 7 | 36 | 29 | 14 | 4.6 | 4.9 | 4.1 |
| 4. Knows when students do not understand something. | -- | 5.6- | 5.6- | 4.9 | | | | 7 | 29 | 64 | | 14 | 5.4 | 5.5 | 4.9 |
| 5. Makes sure that course materials are available to students. | | 6.1 | 6.4 | 5.8 | | | | 14 | | 21 | 64 | 14 | 5.9 | 6.3 | 5.8 |
| 6. Gives tests which require a student to actually perform a skill. | -- | 5.8 | 5.5- | 4.8- | | | | 36 | | 43 | 21 | 14 | 5.5 | 5.6 | 4.6 |
| 7. Praises students for good work. | | 6.1 | 6.4 | 5.1 | | | | 7 | | 36 | 57 | 14 | 5.8 | 6.4 | 5.0 |
| 8. Is willing to give his/her time to help individual students. | | 5.7 | 6.4 | 5.6 | | | | 7 | 7 | 21 | 64 | 14 | 5.6 | 6.4 | 5.5 |
| 9. Informs students of their progress in the course. | | 5.8 | 6.2 | 5.1 | | | | 7 | 14 | 29 | 50 | 14 | 5.6 | 6.1 | 4.9 |
| 10. Treats students unfairly based on what race or religion they are. | +++ | 1.3+ | 1.4+ | 1.8+ | 92 | | | | | 8 | | 12 | 1.2 | 1.7 | 1.6 |
| 11. Seems prepared for each day's class session. | + | 6.0 | 6.0 | 6.1+ | | | | 14 | | 57 | 29 | 14 | 5.8 | 6.3 | 6.0 |
| 12. When explaining something, has the facts at his/her fingertips. | | 6.2 | 5.9 | 5.4 | | | | 7 | 29 | 36 | 29 | 14 | 5.7 | 6.0 | 5.4 |

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| SUPERVISOR | TEACHER | STUDENT | PROGRAM | STATE | SCHOOL | DATE ADMIN. | REPORT DATE |
|---|---|---|---|---|---|---|---|
| N=29 | N=14 | N=189 | | VA | 207 | 11-77 | 11-78 |

# EVALUATION OF INSTRUCTION

## SCHOOL FEEDBACK

♦ = ITEMS RATED HIGH BY RATERS
\- = ITEMS RATED LOW BY RATERS

| | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=29 14 189 | | | TEACHER RATINGS (PERCENT) FOR THIS SCHOOL | | | | | | | | STATE AVERAGES SCHOOLS N=68 66 849 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NEVER | SELDOM | | SOMETIMES | | OFTEN | ALWAYS | NUMBER RESPONDING | | | |
| | | SUPERVISOR | TEACHER | STUDENTS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | SUPERVISOR | TEACHER | STUDENT |
| 13. Encourages students to talk about their own ideas. | - | 5.7 | 6.4 | 4.8- | | | | 7 | | 43 | 50 | 14 | 5.4 | 6.1 | 4.8 |
| 14. Explains things clearly. | | 5.8 | 5.9 | 5.6 | | | | 14 | 7 | 50 | 29 | 14 | 5.6 | 6.1 | 5.7 |
| 15. Provides the opportunity for students to practice new skills. | | 6.1 | 6.4 | 5.4 | | | | | 14 | 29 | 57 | 14 | 6.0 | 6.1 | 5.4 |
| 16. Uses job-related examples when giving explanations. | ♦ | 6.3♦ | 6.4 | 5.3 | | | | | 7 | 43 | 50 | 14 | 5.8 | 6.8 | 5.2 |
| 17. Shows students how to perform new skills. | ♦ | 6.2 | 6.6♦ | 5.7 | | | | | | 43 | 57 | 14 | 6.0 | 6.4 | 5.5 |
| 18. Asks students to evaluate his/her teaching. | --- | 4.7- | 4.9- | 3.4- | | | 8 | 8 | 23 | 31 | 8 | 23 | 13 | 3.8 | 4.3 | 3.9 |
| 19. Uses competitive events or skill olympics (as in VICA or DECA or FFA) to evaluate student skill performance. | --- | 5.3- | 5.5- | 3.7- | 8 | 8 | | 8 | 8 | 23 | 46 | 13 | 4.3 | 4.4 | 3.3 |
| 20. Makes students feel free to ask questions. | ♦♦ | 6.1 | 6.6♦ | 6.3♦ | | | | | | 36 | 64 | 14 | 5.9 | 6.6 | 6.1 |
| 21. Knows when students need extra help. | | 5.8 | 6.2 | 5.2 | | | | | | 79 | 21 | 14 | 5.5 | 6.0 | 5.1 |
| 22. Makes sure that all equipment is in working order. | ♦ | 6.2 | 6.2 | 5.9♦ | | | | 8 | 8 | 46 | 38 | 13 | 5.8 | 6.2 | 5.9 |
| 23. Gives assignments that help students learn course content. | - | 5.9 | 5.7- | 5.6 | | 7 | | 7 | 14 | 43 | 29 | 14 | 5.8 | 6.0 | 5.6 |
| 24. Appears to like teaching. | - | 6.1 | 5.7- | 5.6 | | 7 | 7 | 14 | | 21 | 50 | 14 | 5.5 | 5.9 | 5.6 |
| 25. Suggests that students discuss test results with him/her. | - | 5.7 | 6.2 | 4.4- | | | | 14 | | 36 | 50 | 14 | 5.2 | 6.2 | 4.5 |
| 26. Gives tests that are directly related to the course content. | | 5.9 | 6.3 | 5.5 | | | | 14 | 7 | 14 | 64 | 14 | 5.5 | 6.4 | 5.0 |
| 27. Plans instructional activities to meet individual needs of students. | - - | 5.4- | 5.9 | 4.6- | | | | 15 | 15 | 31 | 38 | 13 | 5.1 | 5.9 | 4.7 |

SUPERVISOR N=29 TEACHER N=14 STUDENT N=189 PROGRAM

# EVALUATION OF INSTRUCTION

## SCHOOL FEEDBACK

STATE VA SCHOOL 287 DATE ADMIN. PERIOD 11-77

+ = ITEMS RATED HIGH BY RATERS
- = ITEMS RATED LOW BY RATERS

| | ITEMS TO THINK ABOUT | YOUR SCHOOL-S AVERAGES N=29 14 189 | | | TEACHER RATINGS (PERCENT) FOR THIS SCHOOL | | | | | | | | STATE AVERAGES SCHOOLS N=68 66 849 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUPERVISOR | TEACHER | STUDENTS | STRONGLY DISAGREE 1 | 2 | 3 | AGREE 4 | 5 | STRONGLY AGREE 6 | 7 | NUMBER RESPONDING | SUPERVISOR | TEACHER | STUDENT |
| 28. Is unfriendly to students. | +++ | 1.4+ | 1.2+ | 2.0+ | 85 | 15 | | | | | | 13 | 1.5 | 1.4 | 2.1 |
| 29. Handles course activities in an orderly way. | | 5.7 | 5.9 | 5.3 | | | | 21 | 14 | 21 | 43 | 14 | 5.3 | 5.0 | 5.4 |
| 30. Encourages students to participate in student organizations (example: VICA, DECA, or FHA). | -- | 5.6- | 5.6- | 5.1 | | 7 | | 21 | 14 | 14 | 43 | 14 | 4.7 | 5.5 | 4.9 |
| 31. Is more concerned about having students learn than giving grades. | + | 6.1 | 6.6+ | 5.6 | | | | | 7 | 29 | 64 | 14 | 5.6 | 6.5 | 5.3 |
| 32. Appears to have complete knowledge of the subject he/she teaches. | + + | 6.4+ | 6.4 | 5.9+ | | | | | 7 | 50 | 43 | 14 | 5.7 | 6.1 | 5.9 |
| 33. Tells students what they must do or learn in order to successfully complete the course. | + | 6.0 | 6.6+ | 5.4 | | | | | 7 | 21 | 71 | 14 | 5.5 | 6.3 | 5.3 |
| 34. Appears interested in the occupational field he/she teaches. | ++ | 6.5+ | 6.7+ | 5.8 | | | | | 7 | 14 | 79 | 14 | 5.8 | 6.6 | 5.8 |
| 35. Seems to be concerned about each student. | + | 5.9 | 6.7+ | 5.5 | | | | | 7 | 14 | 79 | 14 | 5.4 | 6.6 | 5.4 |
| 36. Appears to have a good background of occupational experience. | + | 6.4+ | 6.5 | 5.4 | | | | | 14 | 21 | 64 | 14 | 5.6 | 6.2 | 5.5 |
| 37. Works closely with students who have special needs. | - | 5.5- | 6.2 | 4.9 | | | | | 15 | 54 | 31 | 13 | 5.1 | 6.0 | 5.0 |

| SUPERVISOR | TEACHER | STUDENT | PROGRAM | STATE | SCHOOL | DATE ADMIN. | REPORT DATE |
|---|---|---|---|---|---|---|---|
| N=29 | N=14 | N=189 | | VA | 207 | 11-77 | 11-78 |

| TOTALS WILL NOT EQUAL 100 PCT. IF THERE ARE OMITS (ITEMS 1-15) | | | | | | SCHOOL FEEDBACK EVALUATION OF INSTRUCTION | STUDENT RATINGS (PERCENT) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Overall ability to teach. | | | | | | | | | | | | |
| TEACHER RATING | 2 | 3 | 4 | 5 | 4.0 | 3. How much do you like this instructor personally? | 1 | 1 | 2 | 3 | 2 | 5 | 4.5 |
| STUDENT RATING | 2 | 2 | 4 | 5 | 4.0 | 4. How much do you like the content of this occupational program? | 1 | 2 | 2 | 3 | 3 | 5 | 4.5 |
| SUPERVISOR RATING | 2 | 2 | 4 | 5 | 3.8 | 5. Has the instructor changed the way you feel about this occupational program? | 1 | 2 | 2 | 3 | 4 | 2 | 3.9 |
| 2. Overall technical knowledge of the occupational program. | | | | | | 6. How much effort have you put into this course? | 1 | 1 | 2 | 3 | 5 | 5 | 3.8 |
| TEACHER RATING | 2 | 3 | 4 | 5 | 4.5 | 7. How much has this instructor increased your technical knowledge? | 1 | 1 | 2 | 3 | 5 | 5 | 4.0 |
| STUDENT RATING | 2 | 3 | 4 | 5 | 4.3 | 8. How much has this instructor improved your skill performance? | 1 | 2 | 2 | 3 | 5 | 5 | 3.8 |
| SUPERVISOR RATING | 2 | 3 | 4 | 5 | 4.1 | 9. Rate your occupational achievement in this course relative to other students. | 1 | 2 | 2 | 6 | 4 | 5 | 3.4 |
| 1 | 2 | 3 | 4 | 5 | 3.7 | 10. Overall proficiency in instructional planning. | 1 | 1 | 4 | 3 | 4 | 5 | 3.6 |
| 1 | 2 | 3 | 4 | 5 | 3.7 | 11. Overall proficiency in instructional delivery. | 1 | 1 | 0 | 3 | 5 | 5 | 3.7 |
| 1 | 2 | 3 | 4 | 5 | 3.6 | 12. Overall proficiency in instructional evaluation. | 1 | 1 | 0 | 3 | 5 | 5 | 3.7 |
| 1 | 2 | 3 | 4 | 5 | 4.1 | 13. During the past year, how often has your supervisor visited your classroom or shop while in session? | 1 | 2 | 4 | 29 | 4 | 5 | 3.7 |
| 1 | 2 | 3 | 4 | 5 | 3.5 | 14. During the past year, how often have you had a discussion with your supervisor about your progress and/or concerns? | 1 | 2 | 0 | 41 | 4 | 8 | 3.6 |
| 1 | 2 | 3 | 4 | 5 | 4.3 | 15. How long has your supervisor been supervising your instructional activities? | 1 | 19 | 3 | 11 | 5 | 0 | 4.3 |

## Appendix E:
## REPORT 1: GUIDE TO READING AND INTERPRETING COMPUTER PRINTOUTS.

Minnesota Research and Development Center
for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

# Report 1: Guide to Reading and Interpreting Teacher's Computer Printouts

## Staff Development for Vocational Educators

## NOTICE

Although there were several initial research indications that the instruments used in this study have reliability and validity, caution is still advised in interpreting the ratings and scores as fact. More specifically, information that is based on averages should be interpreted in terms of the number of students, teachers or supervisors participating. Also, the information about individual teachers was *not* designed for administrative decisions, but rather for individual self-improvement.

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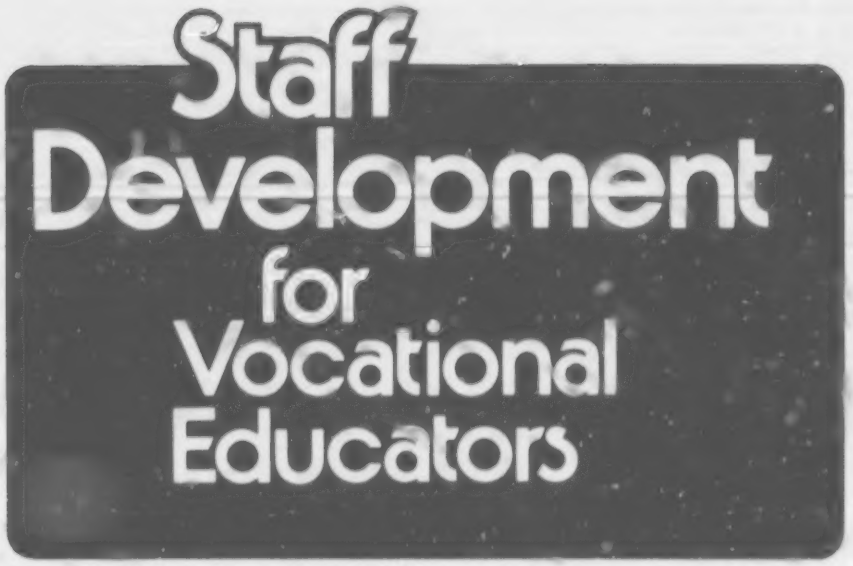
# Report 1: Guide to Reading and Interpreting Teacher's Computer Printouts

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and
Ronald C. Dreyer

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Revised April, 1979

Minnesota Research and Development Center
for Vocational Education
Department of Vocational and Technical Education
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D. Allen

R. Dreyer

# PREFACE

From 1975-77, the Minnesota Research and Development Center (MRDC) for Vocational Education conducted a state-supported research project to develop questionnaires and a feedback system that could be used to plan individual professional development. During the 1977-78 academic year, the U.S. Office of Education funded a research project through the MRDC to refine the 1975-77 research products and develop a transportable set of instruments and feedback system. The USOE project involved the assistance of students, teacher, supervisors, and administrators in three states: Kentucky, Virginia, and Wisconsin. During the 1978-79 academic year the Minnesota State Department of Education funded similar research involving eight Area Vocational-Technical Institutes in Minnesota.

As a result of the past five years of research, the following products have been developed.

STAFF DEVELOPMENT INSTRUMENTS (Designed for Optical Scoring)

(1) Background Information Form

(2) Professional Needs Assessment for Vocational Teachers

a. Teacher Form
b. Student Form
c. Supervisor Form

(3) Evaluation of Instruction for Vocational Teachers

a. Teacher Form
b. Student Form
c. Supervisor Form

INTERPRETATION GUIDES

(1) Guide to Reading and Interpreting Teacher's Computer Printouts, Revised, 1979.

(2) Guide to Reading and Interpreting School's Computer Printouts. Revised, 1979.

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- PLANNING AND EVALUATION . . . . . 7

FIGURE I: Sample of Partially Completed Professional Development Planning and Accomplishment Form . . . . . 9

FIGURE II: Professional Development Planning and Accomplishment Form . . . . . 10

- COMPUTER PRINTOUT (Inside back cover)

# INTRODUCTION

## Purpose of this Guide

The teacher is the key to successful, effective vocational education programs. In order to maintain and improve the quality of vocational education, teachers should periodically assess their teaching performance, identify areas where improvement may be needed, and participate in activities for professional self-improvement.

The purpose of this guide is to help a vocational teacher plan his/her growth and development. This guide is designed to help you read and interpret the computer printout from the Professional Needs Assessment ratings and the Evaluation of Instruction ratings.

## Organization of this Guide

This guide is organized into five major sections which are briefly described below:

1. STAFF DEVELOPMENT: AN OVERVIEW - This section presents a brief overview of staff development from a broad perspective. The reader should review this section before continuing to other sections of the guide.

2. DESCRIPTION OF COMPUTER PRINTOUT - In order for the computer printouts to be helpful, it is necessary to understand what the numbers and symbols represent. This section provides such a description by explaining where the numbers come from and how the symbols were derived.

3. INTERPRETING COMPUTER PRINTOUT - Using the computer printout wisely is both the most important and most difficult step in assessing needs. This section provides some suggestions for translating the information on the printout into a few important areas where improvement is needed.

4. PLANNING AND EVALUATION - This section presents some suggestions for planning and evaluating in-service activities. Once needs have been identified, it is necessary to select and participate in appropriate professional development activities. Next the teacher must determine if these activities have been beneficial.

5. COMPUTER PRINTOUTS - This section contains the actual data that summarizes the ratings made by an individual teacher and the teacher's students.

## STAFF DEVELOPMENT: AN OVERVIEW

If a needs assessment system is to provide the most useful information, it should be implemented within a school environment which supports the concept of staff development. A comprehensive staff development program should address several key questions. These key questions are discussed below and should assist the reader in developing his/her own perspective on staff development.

### WHAT IS STAFF DEVELOPMENT?

In a broad context, staff development includes any activities that can potentially increase a person's effectiveness within the school system. More specifically, staff development refers to a planned process of education and training with both the individual and the school benefiting from the process.

### WHY HAVE STAFF DEVELOPMENT?

A well planned staff development program should:

1. Improve the professional competencies of the staff.
2. Improve the technical competencies of the staff.
3. Help the staff meet licensure and relicensure requirements.
4. Help staff achieve long-range career goals.

### WHO SHOULD A STAFF DEVELOPMENT PROGRAM BE DESIGNED FOR?

A comprehensive staff development program should focus on improving the job performance of all school employees, including support staff and professional staff (teachers, supervisors, counselors, administrators, etc.).

### WHO IS RESPONSIBLE FOR STAFF DEVELOPMENT?

Individual: Each teacher, counselor, department head, administrator, etc., is responsible for his/her professional development. Each individual must comply with licensure and relicensure requirements in addition to meeting personal and institutional expectations related to his/her professional role.

Facilitators: Although the individual is responsible for his/her own professional improvement, a variety of people play important roles as facilitators of staff development. These facilitators include teacher educators, local administrators, local supervisors and departmental chairpersons, staff development specialists, and state department of education personnel.

### SUMMARY

The preceding discussion was intended to provide the reader with a brief overview of staff development. The rest of this guide deals only with the needs assessment system for teachers developed by the Minnesota Research and Development Center for Vocational Education at the University of Minnesota.

## DESCRIPTION OF COMPUTER PRINTOUTS

Enclosed in the backcover of this guide you will find a computer printout for the Professional Needs Assessment and/or Evaluation of Instruction questionnaires (depending on which forms were filled out). The following discussion applies to both types of computer printouts.

The description given below helps give meaning to the numbers and symbols found on your computer printout. It is necessary to completely understand the information on your printout before you make interpretations of where improvement is most needed. More will be said in a later section about interpreting the numbers and symbols. The discussion below is organized by the major headings found on the computer printout. You should refer to your printout as you read the following description.

All of the numbers found on your computer printouts are based on the 1-7 rating scales from the questionnaires. The 1-7 indicates how much improvement is needed (Professional Needs Assessment Questionnaire) or your current level of performance (Evaluation of Instruction Questionnaire).

A. RATINGS OF ME BY: Under this heading you will find your self-rating and the average student rating for each item. These two sets of ratings each have been assigned some "+" and "-" symbols. Based on your self ratings, plus symbols were assigned to the items on which you rated yourself best. Minus symbols were assigned to those items where you rated yourself unfavorably. Plus and minus symbols were also assigned to your student ratings and indicate the items on which your students rated you most and least favorably.

B. ITEMS TO THINK ABOUT: This column is designed to help you focus your attention on selected items. It is an exact copy of the plus and minus information found under the heading "RATINGS OF ME BY." For example, two plus symbols indicate that you and your students agree that this is one of your best areas. As another example, a single minus symbol by an item indicates that either your self-rating or your student rating was unfavorable.

C. SUMMARY OF MY STUDENT RATINGS (PERCENT): This section of the printout gives you information on the student ratings you received in each of the 1-7 rating categories for each item rated by students. The numbers are in percent so you can compare student ratings on one item to any other item.

D. YOUR SCHOOL'S AVERAGES: This section gives the average student, teacher, and supervisor ratings of teachers in your school. The numbers in the heading at the top of the columns indicate how many forms were filled out.

The computer printouts were designed to give you enough information in a simple layout to be suitable for interpretation. Hopefully the above description helped you get an initial "feel" for the information. If this has happened, it will facilitate your ability to wisely interpret the numbers and symbols for planning purposes.

# INTERPRETING COMPUTER PRINTOUTS

## Introduction

In an ideal situation every instructor would be able to participate periodically in activities designed to have the greatest impact on improving the teaching-learning situation for their own classroom. For this ideal situation to occur, at least three assumptions must be met. First, an individual instructor must be committed to being actively involved in professional self-development. Second, it must be possible to accurately identify areas where improvement is needed. Finally, from a large variety of resources, e.g., time, courses, travel, sabbatical leaves, etc. (all of which are ideally available) an individual instructor could select the activity or activities that would most effecitvely meet his/her identified needs.

Obviously there are some limitations to each of these assumptions when practiced in the "real" world. This section is merely intended to contribute to the accurate identification of improvement needs.

Before a useful improvement plan can be developed you should be aware of your current professional performance. Your computer printouts provide one source of this information (which happens to be mostly limited to an assessment of teaching skills). By now you should have a "feel" for what is contained in the printouts. Based on your printouts, the following discussion will help isolate needs that are of the greatest importance to you. Keep in mind that these computer printouts are only one source of needs assessment information.

## Ideas to Consider

The numbers on the printout can be thought about in two basic ways. First, the numbers in the printout can be considered individually; for example, is a rating of 4.1 considered high or low relative to the total seven point rating scale? A second and more useful way to think about the numbers is to compare among two or more ratings.

As a place to start, an obvious comparison to consider is between your self-rating and the average rating from your class. Are these two ratings relatively close to each other (say less than one point apart)? It is desirable to have them similar, but if they are not, consider why they may differ. Are your students qualified to rate that particular item? Are you willing to change your own rating after considering how others rated you? What might be a reasonable compromise between your self-rating and the average rating from your class?

Another consideration is the amount of agreement among the students in your class. This information can be found on your printout under the heading "Summary of My Student Ratings". The numbers indicate the percent of students falling in each of the 1-7 rating categories. Are students responses grouped together (high agreement) or do they tend to spread themselves evenly among the seven point rating scale (low agreement)? If student responses are spread out, can this be explained? Is it because students are not qualified to rate the item? Or, is it likely that students are expressing knowledgeable opinions, but it is difficult for you to meet their many expectations? You are in the best position to answer these questions.

A few final considerations will be mentioned before discussing an orderly process for interpreting the information on your printout. In addition to considering item ratings, it is also important to keep in mind how relevant each particular item is to your teaching situation. For example, your rating on a given item may indicate improvement is needed, but because of your vocational area, course objectives, etc., the item may be irrelevant to your teaching situation. The school averages on the right side of the computer printout provide comparison information but are not as likely to help identify your needs.

An important idea to keep in mind while interpreting the data on your printout is that the greater the amount of personal time and thought you invest, the more you can expect to benefit. If the task of interpretation were as simple as selecting the lowest rated item, then the computer printout would have been designed to give you only two or say three of the lowest items. Certainly no two teachers could nor should interpret the numbers in exactly the same way. Techniques of reviewing the data may be similar for all teachers, but final interpretation decisions will be influenced by the values, attitudes, and experiences of each individual teacher. With these ideas in mind, one process of interpreting the information on your computer printout will be presented. Also, a few suggestions will be offered as examples of how other concerns may influence the identification of needs.

## Sample Interpretation Process

The number and symbols on the computer printout are meaningful only within your specific situation. Consequently, each teacher must decide how he or she wants to interpret the computer printout. The following discussion provides a sample that should help you develop your own interpretation process.

An obvious place to begin is with the "Items to Think About" column. Start with the assumption that improvement needs are items identified by a minus ("-"). The minus is a result of how you rated yourself and/or how your students rated you. You

might want to highlight or record these items on a separate sheet of paper. At the same time, it might be helpful to recognize and perhaps group items that have similar content.

You should now attempt to narrow this list to just a few items. Things to consider in narrowing the list include: item ratings, the relevance of each of the items to your job, and what you know about yourself, the students, and your teaching situation.

These few items can be considered the areas where you feel improvement is most needed. However, there are some final ideas to consider. Can your supervisor provide meaningful input to your needs assessment process? Are there other sources of needs assessment information which would be helpful? Finally, can identified needs be put into a meaningful plan of activities for which there are relevant resources (time, courses, etc.)?

## PLANNING AND EVALUATION

By now you should have identified a few improvement needs as a result of reviewing your computer printouts. The following discussion on planning and evaluation pertains only to these needs. However, it must be emphasized that there are other needs assessment techniques as well as requirements from your profession and institution that must be considered in any planning process.

### Planning

For each of your identified needs, select an appropriate inservice activity to help you eliminate the need. Some sample activities are listed below:

*Sample In-service Activities*

- *university courses*
- *observation of "good" teachers*
- *individualized training modules*
- *paid employment*
- *program observations*
- *seminars/workshops*
- *conferences/conventions*
- *professional meetings*
- *sabbatical/industrial leaves*
- *planned industrial observations*
- *assistance from "experts" curriculum writers, teacher educators, special needs coordinators, counselors, administrators, etc.*

While many different inservice activities may be appropriate, a variety of practical considerations (availability, time, relicensure pre-approval, location, etc) enter into the final selection of activities. Refer to the left side of Figure I (page 9) for an example which illustrates some identified needs and appropriate in-service activities.

### Evaluate Progress

After participating in inservice activities, you should evaluate your progress toward eliminating identified needs. The following questions should be considered in evaluating your progress.

- *Reaction: How well did you like the in-service activity?*
- *Learning: How much did you learn in terms of facts, knowledge skills, etc?*
- *Behavior: Did your job-related behavior change after participation in the activity?*
- *Results: What final results were achieved? (For example, use of IEP's, lower student drop-out rate, higher rate of student placement completion of initial teacher license or relicense, changes in student performance, etc.*

After your outcomes or accomplishments have been evaluated, it may be useful to make recommendations for future actions. Some questions to consider in making recommendations are listed below.

- *Are you satisifed with what has been accomplished?*
- *Is more time needed?*
- *Based on outcomes, should new improvement priorities be established.*
- *Would subsequent needs assessment activities help to evaluate outcomes and/or establish new priorities?*

Refer to the right side of Figure I (page 9 ) for an example of how progress can be evaluated. Figure II (page 10) is provided for your own planning.

FIGURE I



PROFESSIONAL DEVELOPMENT PLANNING AND ACCOMPLISHMENT FORM

PLAN FOR: *Jack Plummer* (Instructor's Name) *Practical Nursing* (Vocational Program) DATE: *February 15, 1979*

THIS PLAN COVERS *1* YEAR(S)

THIS PLAN IS BASED ON NEEDS ASSESSMENT INFORMATION OBTAINED FROM:

1. *Professional Needs Assessment*
2. *Evaluation of Instruction*
3. 
4. 
5. 
6. 

| NEED | ACTION | | PROGRESS EVALUATION | |
|---|---|---|---|---|
| | ACTIVITIES | DATE | OUTCOME OF ACTIVITY | RECOMMENDATIONS |
| 1. *Supervise activities of student vocational organizations.*<br>2. *Assist students in preparing for leadership roles in student vocational organizations.* | *NEEDS 1 and 2:*<br>• *Course on Student Organizations*<br>*and*<br>• *Seek advice from a teacher who is active in student vocational organizations* | *March - May, 1979*<br>*March, 1979* | • *COURSE*<br>*Reaction: Well planned and useful*<br>*Learning: Met course objectives. Specifically learned how to supervise VICA activities*<br>*Behavior: Have begun to assist another instructor in supervising VICA*<br>*Results: More of my students have joined VICA. Using VICA skill olympic events to develop course performance tests*<br>• *SEEK ADVICE, etc.*<br>*Reaction, Learning, etc.* | • *Need more help on developing leadership skills through student vocational organizations.*<br>• *Need more information on state and national VICA organizations.* |
| 3. *Plan instructional activities to meet individual needs of students.* | *NEED 3: etc.* | | | |

FIGURE II

Page __ of __

PROFESSIONAL DEVELOPMENT PLANNING AND ACCOMPLISHMENT FORM

PLAN FOR: _____ _____ DATE: _____

(Instructor's Name) (Vocational Program)

THIS PLAN COVERS ___ YEAR(S)

THIS PLAN IS BASED ON NEEDS ASSESSMENT INFORMATION OBTAINED FROM:

1. _____ 3. _____ 5. _____

2. _____ 4. _____ 6. _____

| NEED | ACTION | | PROGRESS EVALUATION | |
|---|---|---|---|---|
| | ACTIVITIES | DATE | OUTCOME OF ACTIVITY | RECOMMENDATIONS |
| | | | | |

| NEED | ACTION | | PROGRESS EVALUATION | |
|---|---|---|---|---|
| | ACTIVITIES | DATE | OUTCOME OF ACTIVITY | RECOMMENDATIONS |
| | | | | |

## Appendix F:
## REPORT 4: GUIDE TO READING AND INTERPRETING SCHOOL'S COMPUTER PRINTOUTS.

Minnesota Research and Development Center
for Vocational Education
Department of Vocational and Technical Education
University of Minnesota
Minneapolis, Minnesota 55455

# Report 4: Guide to Reading and Interpreting School's Computer Printouts

## Staff Development for Vocational Educators

## NOTICE

Although there were several initial research indications that the instruments used in this study have reliability and validity, caution is still advised in interpreting the ratings and scores as fact. More specifically, information that is based on averages should be interpreted in terms of the number of students, teachers or supervisors participating. Also, the information about individual teachers was *not* designed for administrative decisions, but rather for individual self-improvement.

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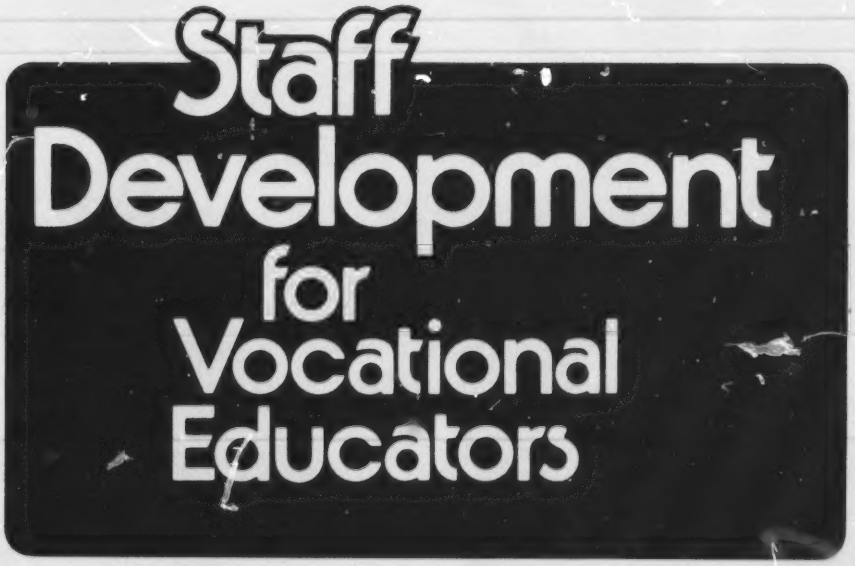
# Report 4: Guide to Reading and Interpreting School's Computer Printouts

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D. Allen

R. Dreyer

# PREFACE

From 1975-77, The Minnesota Research and Development Center (MRDC) for Vocational Education conducted a state-supported research project to develop questionnaires and a feedback system that could be used to plan individual professional development. During the 1977-78 academic year, the U.S. Office of Education funded a research project through the MRDC to refine the 1975-77 research products and develop a transportable set of instruments and feedback system. The USOE project involved the assistance of students, teachers, supervisors, and administrators in three states: Kentucky, Virginia, and Wisconsin. During the 1978-79 academic year, the Minnesota State Department of Education funded similar research involving eight Area Vocational-Technical Institutes in Minnesota.

As a result of the past five years of research, the following products have been developed.

STAFF DEVELOPMENT INSTRUMENTS (Designed for Optical Scoring)

(1) Background Information Form

(2) Professional Needs Assessment for Vocational Teachers

a. Teacher Form
b. Student Form
c. Supervisor Form

(3) Evaluation of Instruction for Vocational Teachers

a. Teacher Form
b. Student Form
c. Supervisor Form

INTERPRETATION GUIDES

(1) Guide to Reading and Interpreting Teacher's Computer Printouts, Revised, 1979.

(2) Guide to Reading and Interpreting School's Computer Printouts, Revised, 1979.

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# INTRODUCTION

## Purpose

The teacher is the key to successful, effective vocational education programs. In order to maintain and improve the quality of vocational education, teachers should periodically assess their teaching performance, identify areas where improvement may be needed, and participate in activities for professional self-improvement. While the teacher must assume responsibility for his/her professional development, the school administration can play an important role in facilitating a teacher's professional improvement.

It is the intention of this guide to provide one source of information that can help in identifying the aggregate professional needs of teachers. It is hoped that this information will assist in the efficient and coordinated planning of appropriate in-service activities for teachers. This guide is designed to help you read and interpret the Professional Needs Assessment and Evaluation of Instruction computer printouts. The information contained in the printouts can be used by administrators, staff development personnel, teacher educators, or anyone responsible for facilitating professional development activities for teachers.

## Organization of this Guide

This guide is organized into five major sections which are briefly described below:

1. STAFF DEVELOPMENT: AN OVERVIEW - This section presents a brief overview of staff development from a broad perspective. The reader should review this section before continuing to other sections of this guide.

2. DESCRIPTION OF COMPUTER PRINTOUT - In order for the computer printouts to be helpful, it is necessary to understand what the numbers and symbols represent. This section provides such a description by explaining how the numbers and symbols were derived.

3. INTERPRETING COMPUTER PRINTOUT - Using the computer printout wisely is both the most important and most difficult step in assessing needs. This section provides some suggestions for translating the information on the printout into a few important areas where improvement is needed for groups of teachers.

4. FACILITATING IN-SERVICE EDUCATION - This section gives some suggestions on how the information on the computer printout can be used for planning in-service activities.

5. COMPUTER PRINTOUTS - The computer printout (located in the back cover) contains the actual data that summarizes the ratings made by teachers, students and supervisors within the school.

## STAFF DEVELOPMENT: AN OVERVIEW

If a needs assessment system is to provide the most useful information, it should be implemented within a school environment which supports the concept of staff development. A comprehensive staff development program should address several key questions. These key questions are discussed below and should assist the reader in developing his/her own perspective on staff development.

### WHAT IS STAFF DEVELOPMENT?

In a broad context, staff development includes any activities that can potentially increase a person's effectiveness within the school system. More specifically, staff development refers to a planned process of education and training with both the individual and the school benefiting from the process.

### WHY HAVE STAFF DEVELOPMENT?

A well planned staff development program should:

1. Improve the professional competencies of the staff.
2. Improve the technical competencies of the staff.
3. Help the staff meet licensure and relicensure requirements.
4. Help staff achieve long-range career goals.

### WHO SHOULD A STAFF DEVELOPMENT PROGRAM BE DESIGNED FOR?

A comprehensive staff development program should focus on improving the job performance of all school employees, including support staff and professional staff (teachers, supervisors, counselors, administrators, etc.).

### WHO IS RESPONSIBLE FOR STAFF DEVELOPMENT?

Individual: Each teacher, counselor, department head, administrator, etc., is responsible for his/her professional development. Each individual must comply with licensure and relicensure requirements in addition to meeting personal and institutional expectations related to his/her professional role.

Facilitators: Although the individual is responsible for his/her own professional improvement, a variety of people play important roles as facilitators of staff development. These facilitators include teacher educators, local administrators, staff development specialists, and state department of education personnel.

### SUMMARY

The preceding discussion was intended to provide the reader with a brief overview of staff development. The rest of this guide deals only with the needs assessment system for teachers developed by the Minnesota Research and Development Center for Vocational Education at the University of Minnesota.

# DESCRIPTION OF COMPUTER PRINTOUTS

Enclosed in the back cover of this guide is a computer printout containing the results of the Professional Needs Assessment and/or Evaluation of Instruction questionnaires (depending on which forms were filled out). The following description, which applies to both types of computer printouts, identifies the numbers and symbols found on the printout. It is necessary to completely understand this information before making interpretations of where improvement is most needed. The discussion below is organized by the major headings found on the computer printout. Refer to your printout as you read this description.

All of the numbers found on the computer printouts are based on the 1-7 rating scales from the questionnaires. The 1-7 indicates how much improvement is needed (Professional Needs Assessment Questionnaire) or your current level of performance (Evaluation of Instruction Questionnaire).

A. YOUR SCHOOL'S AVERAGES: Under this heading you will find averages for teacher, supervisor, and student ratings for each item. These three columns of ratings each have been assigned some "+" and "-" symbols. Within each of these three columns, plus symbols were assigned to several items which were rated most positively. Minus symbols were assigned to those items which were ranked least favorably.

B. ITEMS TO THINK ABOUT: This column is designed to help you focus your attention on selected items. It is an exact copy of the plus and minus information found in the columns under the heading "YOUR SCHOOL'S AVERAGES." For example, two minus symbols (--) indicate that two of the groups (teachers, or students, or supervisors) rated the item unfavorably.

C. TEACHER RATING (PERCENT) FOR THIS SCHOOL: This section of the printout gives you information on the percentage of teachers who rated themselves in each of the 1-7 rating categories for each item. This information should help in planning improvement activities based on the number of teachers who indicated a need for improvement. The numbers are in percent, so ratings on one item can be compared to any other item.

D. STATE AVERAGES: This section gives the average student, teacher, and supervisor ratings of teachers who participated in this state. The numbers in the heading at the top of the columns indicate how many questionnaires were filled out.

The computer printouts were designed to give enough information in a simple layout to be suitable for interpretation. Hopefully the above description helped you get an initial "feel" for the information.

## INTERPRETING COMPUTER PRINTOUTS

The computer printouts in this guide provide one source of information on the aggregate improvement needs of teachers within the school. However, it must be kept in mind that while the printouts help identify how many teachers need improvement they do not indicate who those teachers are. The following discussion provides some suggestions for interpreting the information on the printout.

### Ways to Look at the Data

There are three kinds of information on the computer printout: symbols, averages, and frequency distributions. These three kinds of information can be looked at individually but can be even more useful when reviewed in combination. To assist in interpretation, several ways of reviewing the information on the printouts are discussed below.

1. *The Numbers and Their Meaning*

   The numbers on the printout can be thought about in two basic ways. First, the numbers can be considered individually; for example, is a rating of 4.1 considered high or low relative to (a) the seven-point rating scale and (b) the content of the item? A decision must be made concerning what is considered a good score and a poor score for each item. A second and perhaps more useful way to think about the numbers is to compare one rating to another rating.

2. *Similarity of Raters (Supervisors, Teachers, and Students)*

   The amount of similarity (or difference) between the ratings made by teachers, students, and supervisors should be considered for each item. Are the ratings relatively close to each other (say less than one point apart)? It is desirable to have them similar, but if they are not, consider why they may differ. Teachers do have a tendency to rate themselves more positively than do their students. What might be a reasonable compromise among the three ratings?

3. *Similarity of Teacher Self-Ratings*

   Another consideration is the similarity of self-ratings among the teachers in the school on each item. This information can be found on the printout under the heading "Teacher Ratings (Percent) for this School." The numbers indicate the percent of teachers rating themselves in each of the 1-7 rating categories. Are the teachers ratings on an item grouped together (high similarity of responses) or do they tend to spread themselves evenly across the seven point rating scale (low similarity of responses)? This information indicates the amount and type of differences among teacher self-ratings which the mean rating does not convey. For example, an item could have a mean of

4.0 but the teachers may distribute themselves in three basic ways: (a) all teachers rated themselves 4.0, or (b) the teachers are evenly spread across the 1-7 scale, or (c) the teachers were split in two groups at opposite ends of the scale. The frequency distribution provides additional useful information which should be reviewed along with the mean.

4. *Relevance/Importance of Item*

The relevance or importance of an item to the educational process and the local situation should be considered. Two items may have similar ratings but they may be very different in terms of their importance in a particular educational setting. Obviously, the item of greater relevance most likely would take precedent over the other item in terms of planning in-service improvement activities.

5. *Comparison to Norm Group*

The information on the right side of the computer printout provides student, teacher, and supervisor averages for all participants in the state during a given period of time. The average ratings for a school could be compared to the state averages; however, caution is advised in making interpretations based on this kind of comparison. Particular attention should be paid to the number of schools included in the state averages. If only a few schools are involved, then the mean ratings certainly may not be representative of the entire state.

Interpreting the data on the printouts requires considerable time and thought. If the task of interpretation were as simple as selecting the least favorably rated items, then the computer printout would have been designed to give you information on only two or three items. However, it is unlikely that any two people could nor should interpret the numbers in exactly the same way. Although various techniques of reviewing the data may be similar, final interpretation decisions will be influenced by various factors such as other information on needs, school philosophy and practice, and local situations. With these limitations and cautions in mind, one process of interpreting the information on the computer printout will be discussed.

## Sample Interpretation Process

Please remember that the numbers and symbols on the computer printout are meaningful only within a specific situation. Consequently, final decisions on interpreting the data should be made by those individuals familiar with the school setting. It would probably be useful to involve a committee of teachers, administrators, teacher educators, and staff development personnel in the interpretation process. The following discussion should help develop a meaningful interpretation process.

1. The first thing an interpretation committee may want to do is decide which items are most critical (or perhaps least important) to the educational process. It is unlikely that all of the items are of equal importance.

2. The next step probably should focus on the "ITEMS TO THINK ABOUT" column on the printout. Start with the assumption that improvement needs are items identified by either two or three minus symbols (-- or ---). These symbols indicate that at least two of the groups (teachers, students, or supervisors) rated the item as an area that needs improvement. You might want to highlight or record these items on a separate sheet of paper. At the same time, it might be helpful to recognize and perhaps group items that have similar content. These items should be compared to those that were identified in Step 1 as being the most important. If the items with multiple minus symbols (-- or ---) were not among those identified in Step 1, perhaps they should not be considered as improvement priorities. However, some additional thought should be given to the item before it is excluded as an important improvement need.

3. While looking at the "ITEMS TO THINK ABOUT COLUMN" pay special attention to those items assigned both a plus and a minus (+ -). This is an indication that the groups of raters are not in agreement on the relative strengths and weaknesses of teachers. The content of the item should be considered in deciding if the difference in opinion between the two groups can be resolved.

4. Another source of information to review is the section on the printout labeled TEACHER RATINGS (PERCENT) FOR THIS SCHOOL. As mentioned previously, this section can provide information on how many teachers rated themselves in each of the seven rating categories. This information sometimes can be more useful than the mean rating.

After looking at the information in several different ways, try to arrive at some conclusions concerning both strengths and areas where improvement may be needed. In arriving at conclusions other sources of information on the improvement needs of teachers should be considered (such as other evaluations or assessments, verbal comments from teachers and students, required program evaluations, etc.). How do the various sources of information support, refute, or compliment each other?

Hopefully, several improvement needs have been identified. Remember, however, that these needs are based on the aggregate responses of individual teachers. Now, the issue becomes one of planning and facilitating appropriate improvement activities to meet identified needs. The next section offers some suggestions for accomplishing this task.

# FACILITATING IN-SERVICE EDUCATION

## Introduction

In an ideal situation every instructor would be able to participate in activities designed to have the greatest impact on improving the teaching-learning situation for his/her own classroom. For this ideal situation to occur, at least three assumptions must be met. First an individual instructor must be committed to professional self-development. Second, it must be possible to accurately identify areas where improvement is needed. Finally, from a large variety of resources, e.g., time, courses, industrial leaves, sabbatical leaves, etc. (all of which are ideally available), an individual instructor could select the activity or activities that would most effectively meet his/her identified needs.

This last assumption is perhaps the most troublesome; it is not likely that sufficient resources are available to meet the personalized needs of every teacher. To the extent that resources are not available, the question becomes one of how to make available those activities that can meet the needs of the greatest number of teachers. This requires information on the aggregate needs of individual teachers; some of these needs should have been identified from the school computer printout.

## Planning

Although you should now have an indication of where improvement may be needed, you still do not know how many or which teachers will actually participate in activities designed to eliminate these needs. More accurate information is required concerning the number of teachers who actually want to participate in various (a) school sponsored inservice days, and (b) teacher education delivery services.

To obtain this kind of information, it may be useful to summarize the improvement needs arrived at from the previous interpretation process on a simple survey form. Then, this survey form could be distributed to teachers within the school to determine which improvement needs/topics they would like to have assistance on. This survey form could list specific topics as well as courses needed for initial licensure and other typical vocational courses. The results of this survey would provide a more definite indication of what activities teachers would actually participate in if available. Consequently, the process of planning appropriate activities for in-service days can be based both on what teachers need and want. And further, the results of this survey can be used to communicate teacher needs (both in terms of specific topics and courses) to teacher education institutions.